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# THE LUNCH-ROOM AT THE ENGLEWOOD HIGH SCHOOL

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The American metropolitan grammar school usually serves a community so compact that the pupils can go home at noon. Union and high schools, on the other hand, draw their patronage from such extensive districts that this is out of the question for the majority of those in attendance. To meet this situation various arrangements have been tried. Of these the most common have been, first, a long noon intermission, as in the grammar schools; second, one long session; and, third, a short recess. The first, besides prolonging unnecessarily the hour of closing, has usually proved detrimental to the peace and comfort of the neighborhood. second is too great a strain on teachers and pupils alike. third, therefore, has in many places, of which Chicago is one, been adopted as affording a reasonable compromise; but along with its adoption there have arisen the need and the demand for a lunch service at once quick and excellent. To show how this situation has been met in one of the Chicago high schools, which may serve in essentials as a type of all, and to discuss some of the social and legal phases of the lunch-room problem, is the purpose of this paper.

The Englewood High School is located in the heart of what was ten years ago a rather sparsely settled suburb, but is now one of the most populous and attractive districts in Chicago. The territory tributary to the school, which now has a population of about 125,000, is two and one-half miles long and two miles wide. Until the September of 1903 the lunch problem was a serious menace to the welfare of the school. Some of the pupils brought sandwiches, cake, and fruit from home. Some purchased waffles at a wagon on the street. Some rushed two blocks to a bakery where pie, dill pickles, and cream puffs were sold. Others refreshed themselves at an inconvenient soda-water fountain. Still others patronized a restaurant which it took them five minutes to reach, and where they waited ten before they were served with a repast which they consumed in five in order to get back to their classes on time. The result of these conditions was often, as one student put it, "a pain in the stomach, an ache in the head, a zero in the teacher's class-book, and a great daub of blueberry pie on the shirt waist." The afternoon classes were lifeless; the school building, during the afternoon session, was foul and slippery with remnants of lunch; and the school yard, to say nothing of adjacent streets and lawns, was so bestrewn with paper bags, banana peels, fragments of broken meats, and decadent bones that the residents and owners thereof were shaken by a chronic palsy which was due half to wrath and half to malaria.

The disadvantages of this situation were recognized and vigorously condemned by parents, pupils, teachers, and public at least as early as 1893, but it was not until July 16, 1902, that the board of education took definite action for relieving it, by authorizing the erection of a lunch-room. An addition, accordingly, arose adjacent to the school. In June, 1903, this improvement was complete, and in September of the same year the lunch-room was put in commission.

The building thus placed at the disposal of the school is a one-story structure, comprising two rooms—a kitchen,  $19\times25$  feet, and a dining-room,  $81\times60$  feet. The seating capacity of the latter is 432, and there are already signs that this will, at no distant date, begin to be overtaxed, as patronage flows in an ever-increasing stream, not only from the high school, but also from two adjacent elementary schools. The scheme of handling the crowds who hasten thither at recess may be understood by reference to the accompanying plan. The student enters from the school at the door A and passes down





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the aisle B to the counter C. At 1 he finds plates; at 2, bread, rolls, and butter; at 3, baked beans; at 4, meat and potatoes; at 5, salads; at 6, soup; at 7, pie, cake, and fruit; at 8, coffee and cocoa; at 9, milk; and at 10, ice-cream. When he arrives at the desk E, an attendant inspects what is on his plate and gives him a check for the amount he has taken. He next goes to a table and eats his luncheon. Finally he passes to the cashier's desk at G, presents his check, pays the sum it calls for, and is allowed to depart. It should be added that a low railing separates the tables from the aisles and counter.

Of course some of the pupils continue to patronize the establishments which they formerly frequented and many continue to bring their lunches from home. The latter have the privilege of eating in the lunch-room provided they buy something, however little, and it is a common thing for them to take a bowl of soup or a cup of cocoa in order to have the benefit of warm refreshment.

In the circumstances thus far explained there is nothing unusual. Nearly all high and union schools need such lunch-rooms, and many have them. In the management of the Englewood lunch-room there appears, however, a social phenomenon which, while it is not unique, is new, instructive, and noteworthy. The catering is not done by an individual for private gain; it is in the hands of the Englewood Woman's Club, the members of which are impelled by a desire for social service.

Though comparisons are odious, it must be said that the results of this arrangement have been pre-eminently satisfactory. Teachers of domestic science who have visited it and tested the service pronounce it almost ideal. The checking, serving, and business details are attended to by a committee of fifty ladies; and the item of salaries being thus reduced to a point much below that which a professional caterer could reach, while both the desire and need of profit are eliminated, a liberality of expenditure for food supplies ordinarily out of the question is made possible. Indeed, it is hardly an exaggeration to say that, while the prices are as low as those of a bakery lunch, everything served is not only wholesome, but attractive to a degree not excelled by the cuisine of a good metropolitan café. Nor is this all. For the pupils of the school to meet daily, as this arrangement enables them to do, with so many of the best women of the community, is in

itself a privilege and an education. Their presence has already proved to be a powerful, though quite informal and indirect, factor in securing good discipline in the school, and the example which they are giving of an unselfish desire to be useful to the community at large cannot fail to inspire the pupils who see this daily object-lesson with some ideals of citizenship of which there is certainly need in America today.



Notwithstanding the attainment of these results, a good deal has been said, both officially and unofficially, in disparagement of the lunch-room proposition in general, and a disposition to withhold support from the ladies has been shown in some quarters. It has been asserted that the board of education has no legal right to construct or maintain lunch-rooms; that, granting the legal right, inasmuch as they injure the business of merchants located near the schools, they should never have been established; and that, now that they have been established, the board, in order to guard against extor-

tion and an improper cuisine, ought to exercise a more rigorous supervision than it has. Although there is no evidence that these objections are strenuously entertained by a great number of people, it must be conceded that they are such as will naturally arise in the minds of those not in possession of full information on the subject, and that they consequently merit attention.

The idea that the school board has no legal right to provide lunchrooms is based on a conception of its functions that is happily obsolescent. It is out of harmony with the sound modern practice of regarding the public school as the chief instrumentality whereby society is to be renewed, protected, and built up. The antithesis between it and the opinion handed down in the Chicago Normal School case, on December 9, 1904, by Judge Tuley, is marked. In that opinion he says:

The board of education is vested with authority in law to take all necessary steps to provide a complete and efficient system of free public schools. This broad law justifies the board in taking whatever action is necessary in relation to broadening the scope of school work. The constitutional provision for a school system confers great powers on boards of education, and I believe intentionally was made as broad as it could be.

Acting evidently in accordance with a similar conception of its powers and duties, the London School Board furnishes the pupils in certain districts with milk in the morning and a dinner at noon; not otherwise, they find, can the work of education go on. Similar conditions in New York are engaging the attention of the Salvation Army in an effort to provide similar assistance to those who need it. Indeed, "Food as a Factor in School Management," or some equivalent caption, will probably in times to come head a chapter in every upto-date work on pedagogy. That chapter cannot be written here, but among the points it will establish will be the following: "Well-fed nations, individuals, and schools are orderly and conservative." "Hunger breeds anarchy." "Keep a good fire under your boiler, if you wish your engine to do good work." "An ounce of beef stew is worth a ton of scolding." "No hungry child can think successfully." "It is the duty of the school board to protect the health of pupils and to do whatever is needed to secure the advantages of punctuality, regular attendance, and good behavior in the schools." That the Englewood lunch-room has improved the school in all of these respects

is certain. There are now fewer colds and less dyspepsia among the pupils than formerly. Attendance and scholarship are correspondingly improved. From the afternoon session tardiness has been practically eliminated. There has been a marked improvement in the attention, behavior, and efficiency of the afternoon classes. The pupils themselves bear witness to the fact that the warm lunch renews



their strength for the afternoon classes, and say that the genial sociability of the lunch hour enables them to talk over the events of the morning with their friends, so that the temptation to loiter in the hall or whisper in the study-room is reduced. In view of these facts it is not too much to assert that, if the school board has the legal right to suspend unruly pupils, to heat its buildings, or to provide proper plumbing, it has also the legal right to build and operate lunch-rooms.

Granting all this to be true, however, it is still held that the lunchroom is a monopoly and ought not to exist because it injures the

business of neighboring tradesmen. One baker has closed his shop owing to its competition; the waffle man suffers; the soda fountain is no longer patronized. There has likewise been some diminution in the business of the doctors. To these arguments it is replied that the right of the lunch-room to exist should be judged by its effect on the whole community and not on a few individuals; that it has proved a boon to the mothers, whom it has relieved of the burden of putting up lunches, and to the children, who are no longer obliged to carry them; that the health of the young people is more important than the prosperity of the baker; and that the lunch-room, instead of injuring the business interests of the community, has actually benefited them. because, by making the children healthier, it has increased rather than diminished the consumption of food, so that what the apothecary loses in the sale of pills and soda-water the butcher more than gains in that of mutton and beef. It should be noted further that, had any of the merchants who complain of the competition of the lunchroom established a service adequate to the needs of the school at any time during the years when its want was so keenly felt, the board of education would have been more than glad to be relieved of the expense and responsibility which it has entailed. It was only with great reluctance and after long delay that they expended public money for a necessity which private enterprise could not or would not provide.

Driven thus from their outer works, the critics have still an inner line of defenses. The prices, they say, are too high; the quality of the food served is not what it should be; the children eat too much pastry and too little wholesome food. In order to remedy these evils the board should do two things: it should exercise a rigid supervision of the service, and it should charge a rental for the use of the lunchrooms.

The first of these propositions is reasonable, and probably in some schools necessary. There are grounds for believing this to be so; but in the case of the Englewood lunch-room such supervision would be superfluous. Reference has already been made to the excellent quality of the food served. As to whether the prices are extortionate or not, the reader may judge from the subjoined table, which is a transcript of one of the bills of fare posted each day in the lunch-room:

Beef stew	Oyster soup 5
Chicken pie	
Baked beans	
Mashed potatoes	
Nut salad	
Potato salad	
Tea biscuits	Ice-cream 5
Bread	Coffee 5
Ham sandwiches	Cocoa 3
Butter	Milk 3
Pickles	

The checks average between eleven and twelve cents, an amount which cannot be much greater than the cost of a lunch brought from home. Most men who are accustomed to eat at noon in a downtown restaurant will agree that anyone is in luck who, by paying thirteen cents, can have a dish of oyster soup, a portion of chicken pie, a hot biscuit and butter, and a doughnut "like mother used to make," all abundant in quantity, all appetizing, and all served, not by young men who grow surly unless bribed to do their duty, but by ladies whose presence would adorn any home or grace any social function.

The danger that the sweets will be consumed to the exclusion of the solids has been ingeniously and successfully avoided by two simple expedients. The quality of the latter is far better and the price far lower than those of the former. In most restaurants chicken pie costs about seven times as much as apple pie; here the prices are identical. The coffee, to take another item, is so weak that it is not only harmless, but also quite unattractive; hardly any is sold. In short, in comparison with the sale of articles that are unquestionably wholesome, the sale of those which are perhaps objectionable is insignificant, and this result has been attained without reducing the bills of fare to such Spartan proportions as might render it unattractive, or imposing any vexatious limitations such as the establishment, as has been done in some schools, of a table d'hôte.

From rigid supervision, therefore, it is certain that the patrons of the Englewood lunch-room would gain nothing. If the board should exact rent from the ladies, it is equally certain that the cuisine would be impaired. It is true that during the ten months from September 1, 1903, to June 30, 1904, the Woman's Club cleared over six hundred dollars. It is perfectly proper to inquire why this money should not be paid into the treasury of the board. The reply which the ladies make is in essence as follows: "We have used our profits to assist in the charitable work of our club. If we pay rent, either it or our patrons must suffer. The results which we have attained have been possible only through the active co-operation of a large number of



ladies. If you deprive us of the possibility of aiding charity, you remove the motive which impels them to assist in this enterprise and without which we cannot get their aid. To hire servants to do the work which they have done would cost us at least ten dollars a day, or two thousand dollars for the school year. As a matter of fact, we could not hire such service at any price. We think that two thousand dollars is a sufficient rental for a building that cost eight thousand dollars, and that, having paid it, we are entitled to dispose of our profits as we see fit. There are few business men who, for the sake of a profit of three dollars a day, would undertake to feed

three hundred people. As a matter of fact, that amount is hardly a sufficient margin for safety. During some months, indeed, the lunch-room has been run at a loss; in September, 1904, for example, the receipts were \$673.42 and the expenditures \$830.90."

There are some who say that charity begins at home, and that the ladies should spend upon the school what they make from it. Not



unmindful of the justice of this contention, they have already begun to adorn the school grounds, and have provided a scholarship which is to be placed each year at the disposal of the most deserving member of the graduating class of the school, that she (I say "she" because the most deserving member is invariably a girl) may go to college. No board of education has ever done this; no private lunch-room contractor could do it if he would or would do it if he could. Indeed, it seems likely that the lunch-room may, at no distant day, be the means of providing for the high school, on a scale of liberality hitherto unknown and undreamt of, those maps, lantern slides, pictures, and

books, which no board of education is rich enough to furnish, and by the lack of which the efficiency of secondary education is everywhere so impaired.

In short, to grow to a poin and an end, it may be said that the lunch-room, especially the lunch-room conducted by a woman's club, is at once a luxury and a necessity which no high or union school can afford to be without. It keeps the schoolhouse, the school yard, and the school neighborhood clean. It protects the health of the pupils. It saves their time. It improves their scholarship. In the discipline of the school it is a potent and useful factor. As an object-lesson in social service and civic duty it has a value. Legally, morally, pedagogically, financially, it ought to be and will be. If anyone wants to know what an ideal lunch-room is and can do for a school, he should visit the Englewood lunch-room and see for himself what it is and has done for the Englewood High School.

Actions, it is said, speak louder than words. So do figures, for they are nothing but frozen actions. As a feast commonly ends with cold victuals, an argument may therefore appropriately close with figures. At any rate, this arrangement, if not journalistically, is gastronomically correct, and is accordingly appropriate for the peroration of a discussion on a gastronomical subject. Which, as Dickens might have said, is the *raison d'être* of the location at the end of this paper of the following statistics concerning the Englewood High School lunch-room:

Receipts September, 1903, to June, 1904, inclusive	\$6,146.14
Cost of operating same ten months:	
Salaries \$1,386.30	
Fixtures 351.55	
Food 3,737.68	
Total	5,475-53
Profit September, 1903, to June, 1904, inclusive	\$ 670.51
Size of kitchen	19 X 25
Size of dining-room	81 x 60
Seating capacity	425
Average cost per diem per pupil	12 cents
Number of ladies who serve each day	10
Number of ladies actually assisting	50

### THE LUNCH-ROOM IN THE HIGH SCHOOL

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Half a century ago Charles Dickens, through one of his inimitable caricatures, called attention to the importance of proper diet for boys at boarding-schools. Within a few years, an English physician has thus expressed his opinion on the subject:

It is therefore as important that a master or his wife should qualify as a caterer, or should employ a highly skilled matron, as it is that he should qualify himself to teach languages, mathematics, or science. And the results of his failure in the former branch of his profession have far more deleterious effects on the health of the pupil than incompetence in his capacity for teaching has on his educational prospects. For it is beyond all question true that the health and strength of the individual can be made or marred more permanently during the ten years of life at school—i. e., from nine to nineteen years of age—than during any other period of life, except, perhaps, the first year of infancy.

Though there is still room for improvement in many boardingschools, standards there have advanced rapidly. The dietary schools of the United States Department of Agriculture have been helpful and the general interest in athletics and consequent faith in the training table have had their effect on the food of all schools. More and more the trustees of the schools, colleges, and hospitals are employing trained women to superintend the food supply in such institutions.

But the day pupils in our public schools, even those coming from intelligent and well-to-do families, are not always well fed. It may be as much the duty of the state to supplement at school the insufficient and wrong feeding in the homes as it is to supply the instruction which the parents are unable to give, or to provide textbooks. The education of the appetite may do as much for the future well-being of the citizen and for his efficiency in society as the instruction he receives in the mysteries of the "three R's." In her last book, Mrs. Ellen H. Richards considers a fourth R, "the fundamental

principle of right living," and says further: "The fourth R-right living-may well be considered among the necessities of education." These deeper phases of the question, however, need not be brought forward to prove the wisdom of opening a lunch counter in any high school having a single session of five hours. Not to give the opportunity to secure a warm, palatable luncheon at the recess period would be almost a cruelty to animals. Many teachers have realized that suitable food may play as large a part as natural ability in the widely varying scholarship of different pupils. Unsuitable food, or even an excess of nutritive material, may produce quite as bad effects as insufficient food. / The recent experiments of Professor Chittenden, of Yale University, seem to indicate that better work can be done on a light diet than upon the heavier one which has been considered essential by many. The boy or girl who sleeps late and then hurries to school with little or no breakfast may be no worse off, in the end, than those who overload their stomachs with meat, coffee, and griddle cake; but neither class can do as good work as those who are properly fed. Some city officials have advocated that a breakfast be served free of charge in the public school. Though some parents might be glad to avail themselves of such financial aid, the majority would object to such interference with the home table, however ready they may be to transfer to the schools the moral, religious, and intellectual training of their children.

Many cities of France maintain school canteens or permit private funds to sustain them. In some country districts a warm luncheon is provided by co-operation, each pupil contributing a handful of vegetables or a few sous; a savory soup or stew is started by the older pupils under the direction of the teacher, and so, while the lessons are in progress the noon meal is cooking. The school children of Geneva are furnished with luncheons by voluntary contributions of food and money from the farmers and manufacturers, while the details are arranged by societies formed for the purpose. The London School Board has had to struggle with this problem, with its thousands of children underfed and unfit for school. The People's Kitchen in Vienna has served meals to children during the winter months for about ten cents each. Tickets are distributed by the teachers, and the pupils who can, pay for them, but no one knows

if his neighbor's ticket is given or purchased. A society collects funds to provide the tickets.

The pioneer city in America with school luncheons as with cooking-schools, has been Boston. Beginnings were made in some schools by janitors, but the disadvantages of this plan in any large school are evident. The janitor has enough work to do, and neither he nor any assistants he may employ are likely to have a knowledge of food values. Under such control the natural tendency is to provide foods on which there is the greatest profit, and to yield too much to the demands of the pupils for indigestible compounds. The Boston School Board assumed control of the luncheons in 1894, and Dr. Caroline Hastings was sponsor for the order by which the management of the lunch-rooms was granted to the New England Kitchen. This enterprise was started in Boston early in 1890, under the control of the Rumford Kitchen, and had an exhibit which attracted much attention at the Columbian Exposition in 1893.

The prime mover in this undertaking throughout its existence has been Mrs. Ellen H. Richards, instructor in sanitary chemistry at the Massachusetts Institute of Technology, who has done more than any other woman in this country to call attention to our need of better food, and has also inspired trained women to undertake the scientific and practical preparation of food, as well as to teach others how to do it. Others who have aided this enterprise in various ways are Mrs. Quincy A. Shaw, Mrs. W. V. Kellen, and Mrs. Mary Hinman Abel. The superintendent for several years has been Miss S. E. Wentworth, a graduate of Vassar College.

To cater to the varying tastes of teachers and pupils under the difficult conditions met in the average school basement, and to provide a sufficient quantity of wholesome food at low prices, is not an easy task for any individual or business corporation. This has been done in a more acceptable manner, and on a more scientific and business-like basis, under the direction of these educated women than in any other way that could be devised. Occasional flurries have arisen from changes in the political complexion of the school board, and flimsy charges have been made against the conduct of the lunch-rooms. The best indorsement of the quality of the food supplied and of the management of the lunch-rooms is the steady increase in the sales from year to year.

The past year the New England Kitchen declined to continue the lunches in some of the smaller and distant schools, and now provides only for the ten largest schools of the city. The older schoolhouses had no place where children could eat a luncheon that they might bring from home, much less any place for washing dishes. permanent equipment of counter, sink, and gas stove is now provided by the school board, while the movable furnishings are owned by the . New England Kitchen. The outfit of dish-pans, towels, etc., costs from \$7 to \$10 for a school, while the expense for serving dishes is from \$20 to \$25 for each hundred pupils. Each lunch-room is in charge of an intelligent, responsible woman, who reports daily to the headquarters after the lunch is over, turns in the money received, and accounts for the food which has been delivered to her by express that forenoon. Then she selects from lists at hand the kinds and quantities for the next day. Since this is a desirable occupation for women with homes who wish to earn something outside, there is little difficulty in finding reliable persons to take charge of the lunchrooms. The head worker is assisted by one or more helpers, according to the amount of after cleaning. In some of the larger schools several pupils help at serving time, in return for which they receive an abundant luncheon. The one in charge of a lunch-room usually receives \$1 for three or four hours' work, while the cleaners earn about half as much as the usual rate for work of that kind.

Aside from the list of articles of food which are furnished from the central kitchen daily, there are specials for different days of the week, and these vary week by week and with the season of the year. For example, here is a list of one week's "specials": Monday—macaroni and tomato, coffee jelly with whipped cream; Tuesday—escalloped corn, succotash, Charlotte russe; Wednesday—beef croquettes, rice croquettes, apple pudding; Thursday—chicken pie, bread-and-butter pudding; Friday—fish balls, escalloped fish, tapioca pudding. The amount of food which goes out from the New England Kitchen to the schools daily is something like this: 80 to 90 quarts of milk; 75 to 80 quarts of soup; 50 to 60 quarts of ice-cream; 1,000 or more sandwiches; 300 to 500 sandwich rolls; 75 cakes that are cut in eight pieces each, and more than as many pieces of simple cake in small shapes; all this besides special dishes for the day.

The margin between the profit and loss is so small that it is necessary to keep on hand a supply of fancy crackers for use if the regular stock should give out. Yet so accurately are the attendants able to estimate the quantities required that little food is returned to the kitchen, and very few are ever sent away hungry. The average portion sells for five cents, and the quantities are gauged accordingly, both because it is a convenient sum for the pupil to bring and because it saves trouble in making change. The teachers and some pupils spend larger amounts, but five and ten cents are the average. Since some of the food must be prepared on the previous day, and some of it cannot be kept over to a third day and be in good condition for serving, there is a serious loss when on account of a sudden blizzard several of the suburban high schools close before noon.

Many children bring a partial luncheon from home and supplement it with a glass of milk or cup of hot cocoa or soup. A bainmarie on top of the gas stoves keeps the soups, etc., hot from the time the expressman delivers them until the lunch hour. Cocoa is made at each school, but those in charge soon learn the average amount required so that there is little waste. Coffee is not served. Soups are expensive, generally, and it is impossible often to furnish rich oyster or chicken soup at five cents a cup and pay expenses. For variety these are introduced occasionally. Some gelatine desserts are popular when served with the garnish of whipped cream such as is placed on the cups of cocoa.

The young person is a conservative eater, not over-ready to try new compounds unless a favorable verdict is given by some bolder comrade recognized as a leader in other directions. As Dr. Clement Dukes has said: "If one or two of the elder boys—the swells—refuse a dish, it is tabooed by the whole and remains untasted. Such is the 'society' fashion even among boys."

At one school lunch-room in Boston one of the teachers has frequently expressed his liking for baked beans, and the boys of the school are ready to consume all the beans that may be sent them; while in another boys' school beans have been found to be so unpopular that they are rarely sent there. In some cases a gradual education of individual appetites may be traced, and the attendants report that when a new dish chances to be served two days in succession or at

some near interval, it goes better the second time than the first. The simpler the form in which the food can be served, the better its quality and the less the expense of preparation; for labor is usually to be reckoned as a larger part of the actual cost than the raw food material. High seasoning of any kind is avoided in the Boston school lunches.

Strange to say, much of the comment made by masters, teachers, and parents, not only in Boston, but in other cities, is less intelligent than that of the pupils, and shows the need of popular instruction about foods and their cost and preparation. Many teachers have definite ideas as to wholesome foods, but they are often based upon the conditions of living or the dietetic theories of a generation ago which have been outlived or overturned by recent scientific investigations. The notion is prevalent that meat must be looked to for strength, and there is a consequent undervaluing of milk, vegetables, and grains. The natural appetite of the young person for sweets is usually looked upon as an evil tendency by those who have not learned the value of sugar as a food. Some teachers feel that the lunch-room offers a temptation to spend money and that luncheons should be brought from home, forgetting, apparently, that the food from home also costs money. Few teachers know enough about practical life, the cost and relative merits of different foods, to be competent judges of the quantities that can be served for small sums. They sometimes demand for example, that chicken pies shall be served for five cents each. Because one master did not like buns, he prohibited their appearance upon the lunch counter in his school.

The time of serving lunches in the Boston schools varies according to the program of the individual schools. The usual period is twenty-minutes, and it may come anywhere between 11:30 and 12:30. One high school has a system of its own, and allows students to study at home as soon as their recitations are over. This naturally makes the numbers in the lunch-room vary much on the different days of the week. Nevertheless, in a school of seven hundred pupils the lunch-room is a busy place every day. Settees arranged in the light basement, for boys in one section, for girls in another, are quickly filled by the chattering throng which swarms first around the counter and leaves it nearly as bare as Mother Hubbard's cupboard. The two women behind the counter and the two or three pupil assist-

ants have to "move lively" to hand out one by one a hundred cups of cocoa, nearly as much soup, and the piles of sandwiches and coffee rolls. But there is no crowding or confusion on the part of the hungry pupils, and no unnecessary motions made by those who serve, for everything is ready in advance and arranged in the most systematic fashion.

Though never connected with the management of the New England Kitchen, the writer, as a teacher of cookery, has been interested in watching its progress, since it suggests similar lines of work even in small cities and towns for the women who fit themselves for such positions at the schools of domestic science. Many of the school lunch-rooms in other cities have been patterned after those in Boston, and have far outgrown their model. The women's clubs in many cities east and west have become responsible for the financial support of the lunch-room until it should become self-supporting. In other cases, teachers of cookery or chemistry have acted as directors of the lunch-room, and in some places it has been conducted wholly by the teacher and the pupils of the cooking-school. Where normal pupils have a two-year course at training schools like Drexel Institute, they are required to make a study of the lunch-room conditions and take a share in its management. Such an experience is invaluable to any teacher who must afterward supervise the dietary for a school or college boarding-house.

All types of schools are beginning to provide luncheons nowadays, but the day nurseries were among the first to begin. Here the mothers bring their babies to be cared for while they are away to work. The nursery presents a pretty picture when the tots are having their daily luncheon, which is always simple, but palatable and wholesome. Milk is abundant, both milk to drink and milk soups and puddings. A piece of gingerbread or a bun with milk is a very attractive meal for a small person. An English periodical recently recommended teaching the alphabet by means of chocolate squares with a letter on each. Perhaps some future scheme of education will thus combine physical and mental growth.

The Massachusetts Industrial School for Crippled and Deformed Children provides a daily meal at noon for about seventy-five. Bread and butter is served with each meal in the menu which follows, and

the cost of food materials is under ten cents per person; Monday roast beef, boiled potatoes, macaroni, stewed prunes: Tuesdayboiled fowl, rice, potatoes, cranberry sauce; Wednesday—pea soup, cold corned beef, rice and molasses; Thursday-broiled steak, potatoes, corn, gingerbread; Friday-boiled haddock, potatoes, stewed tomatoes, apricot tapioca. Simmons College, Boston, has no lunch-room in its new building, but has opened one in charge of some of its former students within eight or ten minutes' walk. The cafeteria plan is followed there and the general arrangements are excellent. The school lunch-room in the East High School of Rochester, N. Y., was started about three years ago. Its success warrants the opening of a similar room under the same manager in the new West High School which is not ready for occupancy. The school committee provided an excellent equipment and sustains the undertaking. Now about \$50 monthly is gained over all expenses, and this is turned over to the school funds. There are six hundred little octagonal tables, with twelve hundred chairs to match. Over one thousand pupils are served daily, and some others come in from a neighboring college. The plan differs from that in Boston, since nearly everything is prepared in an adjoining room. Bread, doughnuts, and some cake are bought. Five women work from 7 A. M. till 5:30 P. M. These receive about \$1 daily, and the head cook \$2. Fowls are cooked one day to serve on biscuits the next, and about seven hundred biscuits are required. There are no foods served on stated days, the same dishes being repeated only once in three weeks. No coffee is allowed to pupils, but is ready for teachers who may wish it. Nothing is served for which a knife is necessary. From thirty to fifty pupils assist in serving, and receive their luncheon in payment. The social side is apparent in this and many other school lunch-rooms. and some masters claim that it aids in simplifying the school discipline. Some of the modern school buildings place the lunch-room in the top story instead of the basement, and this will indirectly emphasize the social phase of this growing branch of modern education.

#### SCHOOL LEGISLATION IN OHIO'

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It will be in order first to refer to the status of the school laws of Ohio when the legislature met in regular session in January, 1904, and to sketch the series of events which rendered imperative a complete overhauling of these laws.

Legislation in Ohio, during the two decades prior to 1902, was characterized by an increasing amount of what was termed "special legislation" relating to the government of municipalities. Running parallel with these special acts relating to municipal government, there were a great many special acts pertaining to the organization and administration of schools, particularly in the cities of the state. The justly famous "Cleveland plan" was a piece of special legislation; so was the "Toledo plan," and a number of others not so widely known. All the while the courts were growing impatient with the increasing use of this legislative device, the result being that in June, 1902, the Supreme Court of the state called a halt on the enactment of this class of legislation, and, indeed, forced a special session of the legislature in the summer of 1902, which passed what is commonly known as the "Municipal Code," wiping out a vast deal of special legislation, and unifying the laws relating to the government of cities and villages. The prolonged discussion of the municipal code prevented, at that time, any attempt to amend the school laws, which, as indicated above, were bristling with special acts,

<sup>&</sup>lt;sup>1</sup> There have appeared recently in educational and literary journals a number of rather severe editorial criticisms of the school legislation enacted at the last session of the General Assembly of Ohio. These editorials, it seems to the writer, were in every case based on a misunderstanding of what the General Assembly actually did, and of the purposes which controlled the persons who framed and secured the enactment of the amendatory sections of the school law. It is a pleasure, therefore, to accept the invitation of the editor of the School Review to set forth, briefly, some of the more notable features of the new so-called "Education Act," and to indicate some of its points of merit—points which, it is believed, will commend themselves to educators everywhere.

certain sooner or later to fall before the mandate of the court. So it may be said that for a year and a half the schools in many communities were being administered under a sort of suspension of sentence, the distinct understanding all the while being that the Seventy-sixth General Assembly would be called upon to amend the school laws with a view to making them uniform.

Concerning the necessity of amending the existing school law, the state school commissioner in his annual report for 1903 said:

One of the most important undertakings to come before the Seventy-sixth General Assembly will be the revision of the present school code so as to make its provisions conform to the requirements of the state constitution, as interpreted by the Supreme Court.

Continuing, the commissioner wrote:

I do not believe that a wholesale general repeal of all the existing school laws should be undertaken. Much of the present code is as good as we should be able to secure after months of effort, and should not be disturbed. The unconstitutional sections should be amended, and inconsistencies removed; to these let us hope to add some fairly advanced legislation.

So interest centered on two things: (1) removing the unconstitutional features of the old law, and (2) making of the necessity imposed by Supreme Court decisions an opportunity to forge to the front in all legislative matters relating to the organization and administration of schools. As was to be expected, some laid great stress on the merely amendatory aspect of the undertaking, while others looked upon the occasion as a golden opportunity for "advanced legislation," and so emphasized the importance of that side. In this connection it may be said that during the summer and fall of 1003, and during the four months the legislature was in session, the schoolmasters of the state took a very lively interest in the discussions relative to amending and improving the school laws. Out of these discussions came a number of things which were regarded as imperative, or highly desirable, by the great majority of teachers and superintendents, and which one may designate as the objective points of the campaign. It will help to a clearer understanding of the purposes of the schoolmasters to enumerate at this point the things which were asked of the legislature. Some of these are quoted from the official report of the state school commissioner; others are quoted

from educational journals and documents of the period: (1) A better classification of the school districts of the state, and a clearer definition of each class; (2) small boards of education elected at large for all classes of districts-city, village, township, and special; (3) that boards of education be empowered to make the local tax levy, within a legal limit of ten mills, without restriction by a board of review; (4) that the appointment of teachers and superintendents in cities shall be for a period not to exceed three years, and, after a successful service of five years, the appointment to be during efficiency and good behavior; (5) that the superintendents, in city districts, should appoint all teachers, subject to the confirmation of the board; (6) that city superintendents should be removable during their terms of office by a three-fourths vote of all the members of the board for cause upon written charges; (7) that superintendents should have a seat on the board of education, but should not have the right to vote; (8) that there should be adequate provision for supervision in all districts throughout the state; (9) that every district should have at least seven months school each year; (10) that all classes of districts should have a graded course of study; (11) that the method of examining and certificating teachers should include a provision for uniform examination questions prepared under the direction of the state school commissioner; (12) that some means be devised of affording more state aid to districts which are unable financially to maintain good schools; (13) that the one-mill levy for "the state common school fund" should be continued; (14) that there should be adequate provision for kindergartens and manual training in city districts; (15) that the right of women to vote at school elections be continued; (16) that members for boards of education should be nominated by petition, and voted for on a separate ballot, such ballot not to contain any designation of party or other affiliation. This list, it will be seen, constituted an ambitious legislative program, and it was frequently remarked that if the legislature should deem it wise to pass laws substantially in agreement with the ideas just enumerated, there certainly would be great cause for rejoicing.

What happened when the legislature met? Four educational bills were introduced, one in both Senate and House, and three in

the House only. With respect to the hotly discussed question of the constitution and selection of city boards of education, the first bill introduced was patterned closely after the Cleveland special law, and proposed to extend the Cleveland plan to all villages and counties as well as to all cities of the state. The second provided for small boards of education elected at large in all classes of districts, including all cities. The third was designed in accordance with the plan of representation prescribed by the municipal code; that is, a small fixed number elected at large, the remainder being chosen by wards or subdistricts. The fourth bill was almost a duplicate of the third, except that all city districts were to have three board members elected at large, and four by districts. With respect to other points included in the legislative program outlined above, the four bills did not differ in a way to attract attention widely.

The committees on common schools of both houses to which the educational bills were referred, listened to a vast number of arguments by individuals and delegations representing one or another bill, or some particular feature of the pending bills, or provisions not found in any of them. It is a matter of record that the House committee listened literally to scores of discussions on the various phases of the proposed legislation. In addition to the evidence amassed by the advocates of this, that, or the other measure, the committees themselves undertook some rather extended and thorough investigations concerning the questions in dispute. It is not too much to say that the state has never before in its entire history experienced such widespread interest in school legislation as during the months from January to April, 1904; and it is believed that enough wholesome educational sentiment has been aroused in the state to carry on the excellent work that has been so well begun.

To tell in detail the story of the contest as waged on the floors of both houses, in committee rooms, in public meetings, in star chambers, in the public press, would take a volume, and a big one at that. We leave that task to the future historian, or to some industrious and discerning candidate for a doctor's degree with the onus of a thesis resting upon him.

It will be sufficient in the present review to state the main provisions of the amendments made to the school law, so far as they

relate to the legislative aims enumerated above. Whenever practicable the language of the statute will be given.

1. Classification of school districts.

The state is hereby divided into school districts to be styled, respectively, city school districts, village school districts, township school districts, and special school districts.

This classification is followed by a definition of each class of districts, and by provisions relating to the transfer of territory from one district to another.

2. Size of, and manner of selecting, boards of education.—Under the provisions of the amended school law, the size of the boards of education of thirty-five cities remains unchanged; that is, six members in most cases. In thirty-two cities the size of the board has been reduced. In some cases the reduction has been noteworthy; e. g., Sandusky, Youngstown, and Mansfield, each of which now has twenty board members, will have after the first Monday of January, 1905, seven members elected at large. The reduction in size in a number of other cities is less noticeable; e. g., Cambridge and Canton, which now have six each, will have five under the new law. In four cities the number has been increased from six to seven.

In the matter of election at large rather than by subdistricts or wards, there was greater advance even than in that of the reduction of the size of the boards. Under the amended law, sixty-six cities will elect all of their board members at large. The five largest cities of the state, all with a population of 50,000 and over, are to have "not less than two members nor more than seven members elected at large," and "not less than two members nor more than thirty members elected from subdistricts," the number in each case to be determined by the present school board. By the action of the local school boards, Cleveland will have five members elected at large and two by districts; Cincinnati is to have three at large and twenty-four by subdistricts; Toledo, three at large and two by districts; Columbus, three at large and twelve by districts; Dayton, two at large and ten by districts. Persons who believe in small boards of education elected at large will find much encouragement in the foregoing statement.

<sup>1</sup> A city in Ohio is defined as a municipal corporation which at the last federal census had a population of five thousand or more.

Passing now to the provisions relating to the constitution of village, township, and special district boards, it will be seen that the "small board at large" idea made very marked progress. Under the old law, village and special district boards varied in size from three to twenty, six being the favorite number. The new provision is that all village and special district boards shall consist of five members elected at large. Of township boards it may be said generally that under the old law they were elected by subdistricts, and as a rule were large, containing in some instances eighteen or twenty members. The new law provides for a uniform number of five for all townships, and also for a local director who is to have charge of the schoolhouse and property of his district, to make temporary repairs, to provide the necessary fuel, and to take the enumeration of his district—all under the direction of the township board of education.

3. Power of the board to make tax levy within a legal limit of ten mills.—It will be seen from the following amended sections that the legislature raised the limit suggested by the schoolmasters; and also that city boards must submit their estimates to a city board of review:

Sec. 3958. Each board of education shall, annually, at a regular or special meeting held between the third Monday in April and the first Monday in June, fix the rate of taxation necessary to be levied for all school purposes, after the state funds are exhausted; said levy shall be divided by the board of education into four funds, namely, first, tuition fund; second, building fund; third, contingent fund; fourth, bonds, interest, and sinking fund, and a separate levy shall be made for each fund; provided, that in every city school district, said levies shall be submitted to the board of review of the city, which shall consider the same, and approve or reduce said levies, or any part thereof, and return the same to the board of education, and said levies shall then become valid and effective as so approved or reduced; but if said board of review fail or neglect to act upon said levies within ten days after the receipt of the same from the board of education, then said levies shall become valid and effective without the action of said board of review.

Sec. 3959. The local tax levy for all school purposes shall not exceed twelve mills on the dollar of valuation of taxable property in any school district, but said levy shall not include any special levy, for a specificd purpose, provided for by a vote of the people.

4. Tenure of office of city superintendents and city teachers.

The board of education in each city school district shall appoint a suitable person to act as superintendent of the public schools of the district, for a term not longer than five school years, the term to begin within four months of such appointment. . . . No person shall be appointed as a teacher for a term longer than four school years, nor for a less term than one year except to fill an unexpired term, the term to begin within four months of the date of the appointment, provided that in making appointments teachers in the actual employ of the board shall be first considered before new teachers are chosen in their stead.

5. Power of superintendent to appoint teachers subject to the confirmation of the board.

Said [city] superintendent shall, upon his acceptance of the appointment, become thereby empowered to appoint, subject to the approval and confirmation of the board, all the teachers, and he may for cause suspend any person thus appointed until the board or a committee of the board may consider such suspension, but no one shall be dismissed by the board except as provided in sec. 4017 of the Revised Statutes of Ohio; provided that any city board of education may, upon a three-fourths vote of its full membership, re-employ any teacher whom the superintendent refuses to appoint.

6. With reference to the dismissal of teachers and other appointees the law provides:

Each board may dismiss any appointee or teacher for inefficiency, neglect of duty, immorality, or improper conduct; but no teacher shall be dismissed by any board unless the charges are first reduced to writing and an opportunity be given for defense before the board, or a committee thereof, and a majority of the full membership of the board vote upon roll-call in favor of such dismissal.

7. Right of the superintendent to a seat on the board of education.

He [the city superintendent] . . . . may be required by the board to attend any and all of its meetings and may take part in its deliberations but shall not vote.

8. Adequate provision for supervision in all districts of the state.—
On this point the amended school law is like the old law; that is, it is at most hortatory, not mandatory.

The board of education of each village, township, and special school district may appoint a suitable person to act as superintendent.

It should be said that practically all of the larger villages of the state employ superintendents and clothe them with powers not unlike those vested in city superintendents. Also, that frequently two or more districts unite in the appointment of a competent person to superintend all the schools of the several districts. For example, the superintendent of a village school is not infrequently also superintendent of the schools of one or more townships.

9. A minimum of seven months for the school year.-Here again

the legislature went even farther than the school men suggested, in providing that each board of education shall continue each and every elementary day school not less than thirty-two nor more than forty weeks in each school year.

10. Graded courses of study for all classes of districts.—On this point the law reads:

Boards of education are required to prescribe a graded course of study for all schools under their control in the branches named in sec. 4007-1 of the Revised Statutes of Ohio (eight common branches including civics and hygiene), subject to the approval of the state commissioner of common schools.

The beneficial results which are likely to follow this provision are obvious.

11. Improvement in the methods of examining and certificating teachers, including a provision for uniform examination questions prepared under the direction of the state commissioner, instead of by local boards as at present.—The uniform examination plan is provided as follows:

After the first day of September, 1904, the questions for all county teachers' examinations, throughout the state, shall be prepared under the direction of the state commissioner of common schools, and sample lists shall be mailed, under seal, to the clerks of the said boards of examiners not less than ten days before each examination. Upon the receipt of said lists, the boards are authorized and required to have a sufficient number of copies of the same printed for use in the examination.

This plan, which requires the state commissioner to prepare and mail sample lists of questions to examiners who have copies printed for use in local examinations, is regarded by many as a cumbersome, expensive, and dangerous piece of machinery which should be displaced as soon as possible.

In dealing with the subject of examinations the lawmakers, it seems, lacked the "expert advice" mentioned in one recent editorial. Or possibly it was "mature consideration" which was wanting. For one of the members of the House committee said to the writer: "We simply can't go into this examination business. That can wait." One of the important sections reads:

From and after the first day of September, 1904, three kinds of teachers' certificates only shall be issued by county boards of school examiners; said

I Italics mine.

kinds of teachers' certificates shall be styled respectively, "Teacher's Elementary School Certificate," which shall be valid for all branches of study in schools below high-school rank; "Teacher's High-School Certificate," which shall be valid for all branches of study in recognized high schools and for superintendents; and "Teacher's Special Certificate," which shall be valid in schools of all grades, but only for the branch or branches of study named therein. From and after the first day of September, 1905, no person shall be employed or enter upon the performance of his duties as a teacher in any elementary school supported wholly or in part by the state in any village, township, or special district who has not obtained from a board of school examiners having competent jurisdiction a certificate of good moral character, and that he or she is qualified to teach orthography, reading, writing, arithmetic, English grammar and composition, geography, history of the United States, including civil government, physiology, including narcotics, literature; and that he or she possesses an adequate knowledge of the theory and practice of teaching; and no person shall be employed or enter upon the performance of his duties as a teacher in any recognized high school supported wholly or in part by the state in any village, township, or special school district, or act as a superintendent of school in such district, who has not obtained from a board of examiners having competent jurisdiction a certificate of good moral character, and that he or she is qualified to teach literature, general history, algebra, physics, physiology, including narcotics, and, in addition thereto, four branches elected from the following branches of study: Latin, German, rhetoric, civil government, geometry, physical geography, botany, and chemistry; and that he or she possesses an adequate knowledge of the theory and practice of teaching; and no person shall be employed and enter upon the performance of his duties as a special teacher of music, drawing, painting, penmanship, gymnastics, German, French, the commercial and industrial branches, or any one of them, in any elementary or high school supported wholly or in part by the state in any village, township, or special school district, who has not obtained from a board of examiners having competent jurisdiction a certificate of good moral character, and that he or she is qualified to teach the special branch or branches of study, and, in addition thereto, that he or she possesses an adequate knowledge of the theory and practice of teaching; provided, that county boards of school examiners are authorized to recognize or renew, at their discretion, in the appropriate kind and for the same length of time any certificate or certificates held by teachers who may apply for such recognition or renewal prior to the first day of September, 1905; and provided, further, that no person holding a commonschool life certificate issued by the board of state examiners shall be required to hold any other certificate to teach in the elementary schools of the state, nor shall any holder of said common-school life certificate be required by any board to be examined in any of the branches covered by said certificate in order to be granted the teachers' high-school certificate authorized herein.

 The legislature made no special provision for state aid for weak districts. 13, 14, 15. The sections relating to the one mill levy, kindergarten and manual training, the right of women to vote at school elections remain substantially as they were.

16. Nomination of candidates for election to boards of education should be by petition, etc.—The legislature did not go quite so far as some of the more ardent advocates of the nomination-by-petition plan desired. The authority for nomination by petition is as follows:

Not less than fifteen days before the election of members of boards of education, nominations of candidates therefor may be made by nomination papers, signed in the aggregate for each candidate by not less than twenty-five qualified electors of either sex of the school district, except that in city school districts such nomination papers shall be signed by petitioners not less in number than one for every one hundred persons who voted at the next preceding general election in such city.

It is not probable that many communities will avail themselves of the privilege afforded by this section unless the political parties nominate unworthy men for board members. So far only a few communities have had occasion to resort to the petition plan in order to get out worthy candidates.

Extracts from the answers of thirty-nine "representative school people" to the request, "Please be kind enough to state in a sentence or a brief paragraph on the card attached the most evident benefits of the new school code, as you see them manifested in your own city and county," are given below. The "evident benefits" enumerated are: longer terms for school-board members and fewer school elections; authority for increase of school levy; election of board members at large; provision for small boards in cities; small boards elected at large much better for rural districts; encourages better grading and supervision of rural schools; tendency to give education a fair proportion of the taxes; increase of teachers' salaries; increase of length of school term in rural districts; makes position of teachers and superintendent more secure; improvement in the method of examining and certificating teachers; uniform questions prepared by an expert; increased interest in the selection of boards of education in rural districts; increased and legally defined powers of superintendent;

<sup>&</sup>lt;sup>1</sup> These extracts are published by the courtesy of the editor of the *Ohio Educational Monthly*, in the October, 1904, number of which an article appeared under the title, "Symposium on the School Code."

centralized authority in the selection of teachers; increased attendance at institutes owing to prospect of pay brought about by new law; makes it possible to remove school elections from partisan politics; prevents children under eighteen years of age from getting certificates to teach; encourages professional teaching; increased interest in reading circle work; provision for high-school certificates will raise the grade of that class of teachers.

In addition to these, and a number of other benefits which are designated specifically, there are found in these replies a number of expressions of general satisfaction with the amended law. These replies show conclusively, it would seem, that Ohio educators regard the recent school legislation, excepting a small number of unavoidable defects, as sane and in the line of progress.

#### THE SUPERINTENDENT AND THE HIGH SCHOOL<sup>1</sup>

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A few months ago a manager of a teachers' agency, a man of considerable knowledge of schools and teachers throughout southern New England, was speaking to me upon the significance of the concerted movement of school superintendents in Massachusetts within the past five years to correct what has seemed to them the too great independence of the high school, to articulate it more closely to the rest of the school system, and to bring it more consciously and confessedly under their oversight and authority. As to the fact that superintendents are honoring the high school with a larger share of their time and attention than formerly, I suppose there is no question, whatever the reason may be, and I imagine that few of us have failed to notice the increasing pressure from the power above us, or have been allowed to forget that we are not independent masters of independent schools, but are officers in a system which is organized under a supreme central authority. This relationship of ours to the general school system as a fact is one with which we have no quarrel; it has its advantages and its disadvantages, like many other relationships, and we are perfectly familiar with it. It is the way in which this fact is being forced upon the attention of some of us, and the advantage that is being taken of it to affect our individual freedom and our professional status, that chiefly concerns us.

The problem that confronts the superintendent of schools is one of the most difficult, if not the most difficult, that any civil authority in the United States has to work out. He is himself, in the mind of the law, the one generally unnecessary unit in the school system. He is made possible by a permissive statute—I am speaking, of course, of Massachusetts law—and is the creature of the school board that appoints him. Of that board he is not a member, and has no voice in its deliberations except by its request or consent. He has no

<sup>1</sup> Read before the Head Masters' Club of Western Massachusetts.

inherent power or authority, and no legal responsibility. He is the agent of the school board. Whatever authority he exercises is delegated, and is subject to correction or instant reversal by the body that gives it. He is as subject to the will of that body, and more directly so, as is the humblest teacher in the entire teaching force. And yet the power and authority that the superintendent actually does exercise are complete and autocratic. If he has the confidence and support of the school board, and especially if he succeeds in making direct communication between the school board and the teachers difficult and infrequent, he exercises in the legislation of that board the powerful initiative of a little prime minister, and wields in the administration of the schools the scepter of a little czar. I do not think of any civil magistrate in the United States or in any of the individual states who is in possession of an authority at once so absolute and far-reaching as that which may be exercised by a superintendent of schools.

The problem of which I spoke consists in the adjustment of this extraordinary authority to the rights and sensibilities of the teachers who are placed beneath it. It is not at all a question of the existence of that authority; it is a question of the proper way of exercising it; and this question, I repeat, is a very difficult one. The superintendent of schools finds, or may find, in his high school—for that is the only department under his jurisdiction with which this paper is concerned—a body of men and women some at least of whom—to speak within bounds—are his equals in ability, education, culture, and social position. It is not inconceivable that in one or more of these qualities they may occasionally surpass him. Of educational theory, as far as it is related to the work of secondary schools, they not infrequently know as much as he knows, and in all that concerns the practical work of their separate departments they are very likely to know more than he does, oftentimes a great deal more.

The very statement of these incongruous conditions, absolute authority on the one side with personal and vocational equality on the other, shows how wise and delicate an adjustment is needed to bring them into an easy balance, and how real the dangers are that constantly threaten the peace and efficiency of parts of our educational system.

The first and most self-evident of these dangers is that of the unwise

interference of the superintendent with the work of the high school and of its individual teachers. One of the most distinguished superintendents in Massachusetts is reported to have said on a public occasion that a superintendent should be able to take any class in any subject in the high school under his charge and teach it better than the regular teacher of that class. I did not hear the superintendent make this remark; it seems almost incredible to me that he could have made it, or anything like it; but if he did say it, it simply shows that in the inscrutable orderings of Providence a wise man may be left to make a very foolish speech. The only possible importance such a statement could have would be in its chance influence upon men of inferior caliber. Some superintendent might arise conceited and ignorant enough to imagine that he could do exactly that thing, and then the mischief would be to pay. Fortunately this is very unlikely to happen, although I have seen superintendents to whom this relationship between superintendent and teachers seems the eminently desirable and fitting one, and who would welcome and encourage the growth of such an impression in regard to themselves among the teachers under their control. I shall make no attempt to classify what may be called cases of "unwise interference." They differ with the individual superintendent, high school, and teaching force. They may include changes in the course of study without sufficient knowledge of the needs and conditions of the school, or without proper weight given to the views and judgment of its faculty. It may be some rearrangement of the school machinery based upon a doctrinaire conception of what is ideal instead of what is known to be practical. It may be an attempt to enforce some method of teaching that is unfitted to the personality of a particular teacher. It may be an assumption of sufficient knowledge to select the textbooks to be used in the different departments, forgetful that a good workman should be a good judge of his own tools. It may be the effort to have cases of discipline brought more directly under his survey. It may be simply the itching desire to have a finger in everything that goes on in the high school, to have nothing a little out of the ordinary happen there that he does not know all about, and to regard any exercise of initiative on the part of the master as an evasion of his authority and an infringement on his prerogatives.

These instances, and many others, are examples of what may happen and is happening under a vigorous movement on the part of superintendents to bring high schools more thoroughly under their control, and high-school men will gain nothing by shutting their eyes to the facts. No one questions that the jurisdiction of the superintendent includes the high school as fully as it does the lowest primary grade. Neither does anyone doubt, I think, that the superintendent is in a position to do the high school most important service, or that his advice and criticism may come to an individual teacher with a weight and effectiveness which no one else is in a position to bring. Nor will anyone deny that there are high schools, and many of them, which need careful overhauling and supervision by a competent superintendent. All this goes without saying. Nevertheless, as far as my experience and observation go, the value of the superintendent's work in general is least apparent when it is directed toward the control of high-school affairs, and it is in that department that he most frequently displays the greatest lack of wisdom in his decisions what to meddle with and what to let alone. The natural and sufficient reasons for this are implied in what I have said before, that in attempting to take the lead in the management of the high school, or in the direction and conduct of its work, he is dealing with questions, conditions, and needs of which, from the very nature of the case, he is likely to know considerably less than those who have these matters directly in charge; and unless he is unusually wise, discreet, and conscious of his own limitations, his efforts, however well meant, are liable to be followed by a degree of irritation and wasted time and energy on the part of his subordinates very largely in excess of any good that he has done.

A second danger has to do with the relation of the high school to the school system of the city or town. I will call it the violation of the integrity of the high school.

Any master who has had experience as a schoolboy or teacher in an academy of repute carries away with him a sense of a common institutional life made fragrant and beautiful by the traditions that cluster about it, and the jubilant loyality of its sons that springs up and overshadows it. He feels that this sense of membership in a body that stands out in individual distinctness, impressing itself upon its

members not only through its present, but through its past, and dignifying every boy that comes into it, not only in his own sight, but in that of his little world outside, with the seal of its own name and history—he is sure, I say, that this sense is a definite emotional and moral possession, working in its own way for honor and devotion to ideals.

The high school, however, is different. He finds there an institution in most cases without either name, history, or tradition; that is, name, history or tradition essentially different from that of hundreds of other high schools of the same or similar grades. It is impressed upon him that he is a closely interlocked part of a great system which has no personality whatsoever, is distinguished in its parts by numbers. is expected to run with the smoothness and regularity of a machine, and is put forth to the world indeed as the supreme product of the American inventive and mechanical genius. From this point of view, it is truly remarkable and admirable, but it is as soulless as a corporation. Nobody can cherish sentiments of lovalty and affection toward a system, or flame into enthusiasm over Grade 6. Just here comes a collision of theories. The master of the high school would make his school a distinct entity. He would have the pupils in the grades feel that the high school is a school by itself, as distinct and separate in a way as the college. He would have the boy or girl look forward to his high-school course as to almost a new life, certainly something apart in its coherence and individuality from that to which he has been used. He would have them surrounded with a new set of names, symbols, and ceremonies. He would have them forget for the time being that they belong to the public-school system or to any system, and would have them feel, if it were possible—which it is not—that they have entered into a body social which in its own sphere and to its own extent is complete, self-perpetuating, different from all other schools in the world, and in possession of the true marks and notes of an alma mater. In this way he believes that the great, undying sense of corporate and spiritual membership in a living organism-a sense that I have called a moral and emotional possession, in early life a joy and strength, in later years a quickener of hardened and dying sensibilities, a sense that every college man knows, and I believe in almost greater degree every graduate of an

endowed school, academy, or seminary, being in the case of the latter the dominant mark of difference between him and the product of the public school—he believes, I say, that this sense might become a part of the life of the schoolboy and schoolgirl in the four years that they spend in their high school.

It is quite possible that the master's dream is a trifle iridescent and his views are somewhat extreme. At all events, he is not likely to do much damage with his vagaries—if such they are, for the forces arrayed against him are too strong. It is indeed interesting to notice how every one in authority over the public-school system-superintendent, school board, mayor—seems concerned to clear away from its smooth and glittering surface every trace of sentiment that may have gathered upon it from the outer air. To any such conception of the high school as I have outlined the modern superintendent is unalterably opposed. It is in his mind antagonistic to two cardinal principles, one of which is that the symmetry and completeness of the "system" must not be interfered with even in theory, and the other, that the passage from the grammar grades to the high school must be made to the young student as easy and natural as possible. The superintendent in his addresses and reports bearing upon graduation from the high school rarely if ever intimates that the successful candidates for diplomas are graduates from an institution or a school with an honorable history of its own; he is careful to remind them that they have now emerged from the top of a prolonged and carefully constructed system, an elaborate mechanism, into which the community plunged them in early childhood and from part to part of which they have been led for thirteen long years, until this final stage has turned them out as the completed product of the entire process. So in smoothing the way from the lower grades to those of the high school the pupil in the last year of the grammar school is told with emphasis that the high school is to be looked upon as the natural and inevitable continuation of his present year; that it is really nothing but Grades 10, 11, 12, and 13 of the school system with which he is already thoroughly familiar, and is in no sense a separate institution. So eager and enthusiastic is the present generation of superintendents to bring about what they call the natural connection and co-ordination of different educational grades that I look forward to overtures on their part to induce the New

England colleges to allow themselves, for example's sake, if nothing more, to be presented to the public as Grades 14, 15, 16, and 17. I must not be understood as attacking or underrating our system of public schools or as opposing the natural progress—for those to whom it is natural—of the pupil from the grades to the high school. I simply contend that neither the perfection of the system nor the unimpeded progress of the pupil requires such a conception and presentation of the high school as is destructive to its integrity as an institution; and that the average superintendent in so conceiving of it and so presenting it to the mind of the public and the children of the public is working against that integrity and causing a moral and ideal loss vastly in excess of any gain to the system or any part of it.

A third danger, and the one that I consider most serious of all is the degradation of the professional spirit in public-school teaching. I say without hesitation that under the present order of things it is absurd for high-school men to speak of their calling as a profession or of themselves as professional men. We may call ourselves high-grade employees, nothing more. This is not the case with all teachers, I am thankful to say. It is not so with college men and women; it is not necessarily so with teachers in private and endowed schools. That is, when teaching falls from the dignity of a profession, admitting that it has ever attained that dignity, it does so owing to the conditions in which it finds itself, and through which it loses one or more of the marks that are essential to a true profession. Among these marks none have been more conspicuous and indelible in the history of the ancient professions than freedom of initiative and action on the part of the individual, subject to occasional restriction only by the voluntarily accepted authority of the organized body of his professional equals. There is never a hint of an individual, autocratic authority above him the weight of which he may be conscious of every working day, and to which he is theoretically responsible for every official act. This freedom of life is a crowning glory of a professional career, prized as highly by its possessor as the liberal education which attends it. In the past, great ones of the earth have envied it; men have been willing to endure toil, poverty, and obscurity to possess it; and even in the present day those who enjoy it would often sacrifice much of material good rather than let it go. I do not forget that there is one profession—historically so called—the marks of which are entirely different from those of which I have been speaking. This is the profession of arms. But I trust there is no need seriously to consider this as a type in principles and methods of what the teacher's calling is in danger of becoming. That would be *nejas* even to suggest. We do find ourselves, however, included in a system the effect of which is to deprive us to a greater or less degree of a professional status. It is useless to quarrel with this fact. The public-school system is a necessity, and its efficiency depends in part upon the thoroughness of its organization. There must be a final authority in educational matters in each city or town, and that final authority for practical purposes is apt to be the superintendent of schools.

But if our professional status is impaired, how about our professional feeling, the inward conviction that it is only the accident of our educational relationships which bars us from that full recognition by the great professional brotherhood to which the character and quality of our service entitle us? Do we really have this conviction, or is it smothered within us by acts and courses of action proceeding from above us which serve as a constant reminder that after all we are only subordinates in an official system, merely employees of a municipal corporation. The answer to this question rests, where there is one, with the superintendent of schools, and in seeking it we confront once more, not his authority, but his wisdom and discretion in exercising it. I repeat that the adjustment of the absolute authority on his part to the personal and social equality that he will find among his teachers, and to the preservation rather than the destruction of their professional spirit, is a problem that calls for extraordinary qualities and qualifications. He must have a competent professional education, but that should not be extraordinary. He must have firmness and the power of self-assertion necessary, but with these in his dealings with his teachers must be united uniform courtesy, consideration for their individualities of thought and temperament, sensitiveness to the effect of his own words, and intellectual humility. He should be wise, tactful, urbane, high-toned. In short, public-school teachers who are gentlemen and ladies have a right to expect that the man who is placed in authority over them shall himself be a gentleman by instinct

and breeding. If he is such, the danger to our professional feeling is reduced to its minimum.

On the other hand, education and business ability do not make a superintendent suited to our needs. If at the same time he has the disposition of a petty tyrant; or is jealous for his own prerogatives; or is underhanded; or is intellectually conceited and narrow; or is dictatorial and regardless in speech and manner; or is suspicious and interfering; or feels that he must justify his official existence by energetic officiousness; or, in other words, is not a refined and highminded gentleman, the danger becomes a reality; we are lowered in fact, and are lowered in our own estimation. If I have set the standard for the superintendent of schools very high, it is no higher than we high-school men have the right to demand in the men who are placed over us. At least we should be able to see an evident desire and effort on the part of these men to reach this standard. Nothing less should satisfy them.

There are superintendents who approach the ideal. There may be many such, possibly very many.

Whatever infelicities characterize the relations of superintendent and high-school teachers, the school board is partly responsible for them, and should be held to account. School boards are pretty careful in looking up the record of candidates for a superintendency as far as their intellectual qualifications are concerned, and their apparent success in administering the local system from which they come. But I am persuaded that school boards often ignore the existence or non-existence of those personal qualities of which I have been speaking, and which are of such vital importance to the real success of the work with the high school. Further than this, the school board is too frequently content to delegate its powers to its executive officer and, having done so, to sever all direct connection with its teachers. It forgets that these teachers are as directly its appointees as the superintendent is, and that the superintendent is no less truly subordinate to the board than the teachers are. It forgets that delegated powers demand an oversight by the original and final authority, and that this oversight cannot be intelligently and conscientiously exercised without regard to the opinion and judgment of the teaching force. It is satisfied to accept without

further investigation the unsupported statements of the superintendent with regard to the work and needs of the schools and the efficiency of the teachers. It will do exactly this in the case of the high school, although the master of the school is in a position to know, and does know, very much more about every one of these points than the superintendent can know. It is the deliberate policy of some superintendents to make it as difficult as possible for teachers to come into direct contact with the school board, and to make themselves the sole channel through which complaint, request, or information shall come to its ears. This is entirely wrong, and no one suffers ultimately from it more than the superintendent himself.

It may safely be assumed that in any matter affecting the conduct of a good high school the consensus of the opinion or of the judgment of the faculty of that school would be of vastly more value than any other judgment or opinion whatsoever. A school board that is deprived of that consensus is imperfectly informed and imperfectly guided. I have never investigated the question, and therefore cannot speak with authority, but I wonder how many school boards are in the habit of seeking directly from the faculty of the high school, or its representatives, an expression of its judgment on important matters affecting its interests. I wonder how many superintendents would suggest or encourage such a practice. Yet it is necessary to a really enlightened administration of the school. Furthermore, it is folly to think that the mind of the school will reach the committee through the voice of the superintendent. However friendly he may be to the teachers of the high school, he is not one of them. His knowledge of them is limited, much more so than he thinks it is. His point of view and policy in regard to the affairs of the school may be different from theirs, and he will not act as their true or trustworthy representative because, if for no other reason, he cannot. And he does not.

It is a peculiar fact that of all classes of employees the publicschool teachers in any community are alone without an organization or medium through which they can express themselves to the public which they serve. As far as uttering their complaints or expressing their desires is concerned, they are like dumb, driven cattle. An individual teacher may now and then lift his voice in plea or protest, but his act is looked upon as of doubtful propriety, and the thought of consulting him or his co-workers with regard to the kind of man who is to be put in authority over them would be looked upon as impracticable and dangerous.

I am not for a moment arguing that the teaching force of a school is the proper body to determine the general policy of the school and the system. I am merely saying that the knowledge possessed by those teachers, their judgment, and their feeling are worth more for the enlightenment of the school authorities and the public than any other means of information, and that this enlightenment will rarely pass, except in a feeble and fitful way, through the medium of the superintendent.

Neither am I contending against the authority of the superintendent. This point I have tried to make very clear. I am only insisting that the more absolute the authority, the greater should be the care and discretion in its use, and the more delicate the adjustment of its relations. Nor, finally, am I belittling the greatness of the work that falls to the superintendent's lot or the potential value of that work to the high school. I am simply demanding that the man who seeks to take that work upon himself shall be fit for it, and that, if he is not fit for it in its entirety, he shall assume no more of it than he is fit for.

More than this no one can ask; and less than this no one has the moral right to impose upon the body of educated men and women who are doing the work of the public high school.

## THE ELECTIVE SYSTEM IN PUBLIC HIGH SCHOOLS 1

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There is, it is true, another side to this question of individuality. Not all the variations are worthy, and it is said that the least commendable may be eliminated by prescribed studies. There is a limit to the desirable development of personal traits. If, indeed, any course of study prescribed for all could search out and stunt in each individual his unworthy variations from the normal, we should have to yield a point in favor of required work. But the argument is not sound. In the first place, it assumes that schoolmen are sufficiently wise to decide just what variations from the normal are good and what are bad-just how far it is well to encourage the development of individuality. To accord such wisdom to the makers of programs is to ignore the experience of centuries. Furthermore, there are as many variations as there are individuals, as many special problems as there are pupils. No one answer will suffice. Studies prescribed for large groups—as they must be in public high schools cannot satisfy manifold special needs.

Many types of the abnormal have no place at all in public high schools; much less have they a right to influence the course of study for the ninety and nine per cent. of the normal. For the extremely defective there are special public institutions, as there always must be; and there are private schools which find possibly their only convincing and permanent justification in their ability to care for extreme cases as public schools certainly cannot do.

The time has come when the public high school should fit the work to the pupil, and cease worrying the reluctant teacher with the impossible task of making the pupil fit the work. At least, let us cease condemning the teacher because out of these innumerable differences among individuals he is unable to produce "uniform nonentities." Certainly this is not the purpose of the best teachers of prescribed

<sup>1</sup> Concluded from p. 158.

work; many of them are doing as well as they can to discover and develop the individual; and they do much. That they accomplish no more is the fault of a system which does not encourage or respond to their efforts.

Dean Briggs, of Harvard University, expressing "Some Old-Fashioned Doubts about New-Fashioned Education," phrases a sound and generally accepted principle when he says: "Education should always recognize the fitness of different minds for different work." It is at least pertinent to ask whether the word "always" is not sufficiently comprehensive to include the high-school years. Prescribed courses do not recognize the fitness of different minds for different work; on the contrary, such courses hinder the differentiation of those various individuals in our public schools who are soon to take widely different places in the world outside the schoolroom. No studies should be required of all.

I know that men may still be found clinging to the medieval doctrine that certain subjects alone train certain faculties of the mind—one subject for the reason, another for the memory, still a third for the imagination, and possibly one royal subject (their specialty) which trains all the faculties. I also know of men who would go hungry rather than sit at a table of thirteen. But ideas which have long been banished to the vast limbo of educational absurdities cannot well affect this question in the present day. The advocates of the elective system believe that it takes an ingenious child to choose a high-school course of studies which (if properly taught—the necessary proviso) will seriously neglect the training of any important faculty of the mind.

For reasons soon to appear, I shall spend but little time on the discussion of educational values. I believe that the prestige of the studies which have been imposed on students most commonly—say, Latin, geometry, algebra—is due to tradition; it is the heritage from an age when the field of knowledge was much narrower than it is today, when science had no place; it is due to this, as well as to the conservative influences so strong in education, and to the remarkable body of teachers and well-organized methods and materials which these subjects, more than others, have had in the past.

But the opponents of the elective system free its advocates from

the need of any discussion of relative values of studies; the reason is plain—the final, incontestable reason why no high-school studies can be sensibly prescribed for all—the opponents of free choice are utterly unable to agree among themselves as to what the prescribed course should be. In proof I could fill volumes with suggested schedules. I have before me more than a hundred different courses of study prescribed for high schools, agreeing in one point only, namely, in prescribing something. For example, some prescribe physiology the first year; others prescribe it the last year; others omit it entirely. When there are not a half-dozen high schools in the entire country, under separate management, with identical courses of study, is it not preposterous to maintain that there is a vital, fixed interrelation and one natural sequence of subjects?

Says S. D. Brooks: "So in a program—much should be insisted on;" and he insists on one program. Says W. T. Harris: "All studies should be required;" and he insists on another program. This diversity of opinion is typical, and, as Professor Greenough says, "fairly represents the breaking up of all the old opinions as to what should constitute a liberal education."

Albert Stickney, a radical adversary of the elective principle, said before the New York Harvard Club: "As to what this prescribed course of study should be, we laymen do not pretend to say; as to that point we are profoundly ignorant." That is just the crux, the fatal weakness in the whole case against the new system. That is at least one difficulty on which both sides must agree, for as to any studies which should be required of all students in all public high schools the advocates of the elective principle are also "profoundly ignorant."

The disagreement as to what those "certain essential studies" are indicates a fallacy in the whole argument. That fallacy is the assumption of the educational value of each subject for all students, whereas contemporary literature, teachers' conventions—all educational discussions—prove that we have no such definite knowledge to guide us. Studies undoubtedly vary in educational worth just as food products vary in nourishing value. But is it sensible to say that therefore a schoolmaster should prescribe the same curriculum for all his pupils, and a physician the same diet for all his patients?

Certainly not, for in both instances the value of the food depends on the power of the individual to assimilate it. The schoolmaster, as well as the physician, must diagnose each case before prescribing. It is impossible to determine, even at a given time, a fixed educational value of any subject for all pupils: there is no such thing.

Still another difficulty is suggested in a recent number of the School Review: most of us are inclined to think that the particular studies which we ourselves have pursued are on the whole superior, and that the one study to which we have devoted most time is the aristocrat of the whole group. It is certainly difficult for a teacher to eliminate the personal equation; and if he could do so, I wonder if we should want him.

These, then, seem to be the main reasons for the general disagreement as to what should constitute the prescribed course: the impossibility of successfully educating different individuals by one régime, of determining the fixed value of any study for all pupils, or of eliminating prejudices.

Whatever the reasons may be, the fact remains—a stubborn one for those who decry the elective plan—they cannot agree.

Added to all this we have the lessons of history. I shall not here attempt to epitomize the wearisome account of centuries of prescribed studies. Every age has had its ideal curriculum. We now see, or think we see, that for centuries these have all been wrong. No country at any time has ever devised a school program which to us appears to have been perfectly adapted to the needs of all its people. Still there are men who, unmindful of the infinite diversity among individuals, oblivious of the fatal disagreements among themselves, and regardless of the plain lessons of history, are so presumptuous as fondly to imagine that at last to them—to them alone—has been revealed the one prescribed course which we can safely impose—nay, which we must impose—on all our children.

If at this point we take another look at our syllogism, we find that the combined testimony of both sides of the question overthrows the first premise: with it falls the syllogism. Still, not all the advocates of required studies will be satisfied with the foregoing argument. Here is a man who wishes to test the second premise; to inquire whether the studies most frequently urged as essential for all are

not very largely neglected when prescription is removed. He acknowledges the wide disagreement as to what the fixed course should be, but he believes that his own ideas are right; he is sure that no study or group of studies can take the place of Latin; he is sure that, however widely and variously abnormal an individual may be, the one subject he must take is Latin—or is it physiology? The opinion of such a man—even though mere opinion—should not be lightly set aside. He has a right to ask whether students under the elective system will not avoid the studies which are closest to his own heart. And although the answer cannot affect the judgment of those who accept the preceding argument, the answer is at least interesting.

If students to any extent avoid the studies most commonly defended, surely investigation concerning the actual working of the elective system will show that result. Let us see. The high school in Galesburg, Ill., the first to make all studies elective, has now had nine years' experience with the elective system. The superintendent says: "There has been no disposition on the part of the pupils to omit the so-called disciplinary studies for those said to be easy; they have not been inclined to allow their own whims to govern them, nor, what is worse, to follow the whims of others." But is this the experience of the whole country? In answering this question, we may consider the reports of the United States commissioner of education as fairly accurate; at any rate, they are the best evidence available for the whole country, and, if they err at all, are as liable to favor one side as the other. The reports which concern us most closely are those from 1889-90 to 1900-1, during which time the elective principle made greatest progress in public high schools.

Now, although there are no subjects included in all prescribed curricula, there are several subjects more frequently insisted on than others, and of these most fear is expressed for Latin, geometry, and algebra. During the onward march of the new principle, what has been the fate of these subjects? Has the number of boys and girls studying these subjects decreased while the number enrolled in other subjects increased? The theorizing of our opponents leads us to think so. Yet the official reports of the United States commissioner of education for the ten years show that the number of students

<sup>&</sup>lt;sup>1</sup> September, 1895.

in Latin has increased 173 per cent.; in history, 153 per cent.; in geometry, 150 per cent.; in algebra, 141 per cent. In no other subject (except English) has the gain in enrolment been so great.

TABLE I

Studies	1899-90	1900-1	Per cent. of Increase
Latin	100,144	273,314	174
History	82,909	. 210,813	152
Geometry	59,781	150,788	147
Algebra	127,397	308,557	141
German	34,208	83,702	131
French	28,032	44,889	60
Physics	63,644	99,666	50
Chemistry	28,665	40,064	43
Greek	12,860	14,232	0

This is significant. The studies about which there is most fear are the very studies which have actually progressed most, side by side with the elective system.

This is true for the whole country, but is it true for the largest cities where the freedom of choice has been greatest? The answer is given in the same reports. Compare the tables for the public high schools of the largest fifty cities in the United States with the tables for all other public high schools. The ratio of the number of students taking Latin to the whole number of students in the largest cities does not vary three-tenths of 1 per cent. from the similar ratio in the rest of the country.

But still the man of doubt may ask: What are the figures for the North Atlantic Division of the country where there has been widest acceptance of the system? Here in Table II are the results compiled from the report for 1899-1900 of the commissioner of education:

TABLE II Public High Schools

Latin	Greek	French	German	Algebra	Geometr
50.45 47.01	2.63	8.29 18.48	15.45	56.96 50.12	27.83 27.66

The table gives the percentage, in each subject, of the whole number of students enrolled in the public high schools—the first row across for the United States, the second for the North Atlantic Division. Surely there is not here sufficient difference to cause the slightest alarm.

Table V gives further evidence on this question—evidence which may be misleading without a note of explanation. The table gives the number of elections in each of twenty-eight subjects for each of nine public high schools of the city of Boston. This material I have collected for the sake of its bearing on the question of elective studies. I have therefore omitted the Boston Latin School and the Girls' Latin School, in which only a part of the work is optional. The table shows that of the 5,318 pupils enrolled in these nine high schools in the year 1903–4, only 1,154 elected Latin. This small proportion is due to the fact that the majority of boys and girls in the city who desired classical courses elected one of the two schools which are not shown in the table. For the whole city the number of high-school students studying Latin is about one-half the whole number enrolled, which is the proportion given by the commissioner of education for the entire country.

All this goes to prove that in the country as a whole, in the largest cities, in the North Atlantic Division, in the city of Boston—everywhere in the United States—the most rapid growth in the last ten years has been in classics, mathematics, history, and modern languages—a fact which overthrows nine-tenths of the theory regarding the probable fate of certain studies. Under the elective system, students have not to an alarming extent avoided these subjects.

Still we are not done with the first part of the issue; it is further held that pupils will choose foolishly, in that they will elect easy courses, or those for which they are not prepared, or those taught by favorite teachers, or those of little value, or disconnected courses. On these points there has been almost endless theorizing. Schoolmasters are fond of the *a priori* assumption that such things must be; they are not fond of the labor of ascertaining just how things *are*, nor does their daily work leave them the time or the energy for such investigation. Some of this work has been done by the Harvard Education Seminary in the years 1900 to 1904, and the results I have arranged in Table III.

In order to secure information regarding the working of the elective system in the public high schools of the United States, the Harvard Education Seminary secured from the graduating classes of fifty-four schools answers to a series of questions. Only those schools are included in Table III which allowed a large measure of freedom to pupils. A total of 2,485 individual sets of answers were received.

Regarding the motives which determined the choice of studies, the following questions were asked:

Has your choice of studies been determined by any of the following reasons:

- a) Temporary interest due to the recommendation of other students.
- b) The advice of teachers, parents, or guardians.
- c) Deliberate choice in accordance with your own tastes.
- d) The desire to avoid difficult subjects.
- e) If two or more of these reasons have determined your choices, please say so. If other reasons than those enumerated have determined your choices, please give them.

TABLE III

Table of Replies from 2,485 Pupils, in the Graduating Classes of Fifty-four High Schools

No.	School	No. of Replies	, to a	d of "	, to c	b ot "	" to e	Per Cent. Replying "Yes" to						
		No.ol	"Yes"	"Yes"	"Yes"	"Yes"	"Yes"	a	ь	c	d	e		
1	Roxbury	74	1	60	54	2	39	1	81	73	2	53		
2	Lawrence	27	1	20	24	2	8	4	74	73 88	7	29		
3	Leominster	17	0	13	13	X	2		76	76	7 6	12		
4	Chicopee	24	0	13	15	3	4	0	54	63	13	17		
5	Holyoke	44	14	43	34	9	23	32	98	77	20	52		
6	Springfield	67	2	51	57	6	56	3	74	85	9	68		
7 8	Worcester	149	21	100	131	35	56	14	73	88	24	37		
8	Providence, R.I.	68	10	45	55	1	45	14	66	84	1	66		
9	Woonsocket	18	C	11	18	0	3	0	61	100	0	17		
10	Great Falls,										1			
	N. Y	35	13	33	35	1	8	37	94	100	3	22		
II	Utica Free													
	Academy	23	2	13	17	0	18	9	56	73	0	78		
12	New Rochelle	14	0	13	14	0	2	0	95	100	0	13		
13	Saratoga	22	2	14	16	I	6	9	64	72	4	27		
14	Jamestown	38	3	35	30	3	12	8	92	78	8	32		
15	Binghamton	45	7	34	42	4	G	15	75 88	93	9	20		
16	Washburn	8	1	7	6	0	0	12		75	0	0		
17	Hoosick Falls	31	9	31	29	5	2	29	100	93	16	6		
18	Geneva	14	3	11	14	0	5	7	74	100	0	36		
19	Corning	12	0	II	12	0	4	0	91	100	0	25		
20	Topeka	75	16	62	71	10	8	21	83	95	13	II		
21	Canton, O	49	2	38	42	I	10	4	76	84	2	20		

TABLE III-Continued

No.	School	No. of Replies	s" to a	an to b	s" to c	p 01s	s" to ¢	Per	Cent. I	Replyin	g "Yes	" to
		No. of	"Yes" [	"Yes"	"Yes"	"Yes"	"Yes"	а	b	с	d	e
22	Hamilton	61	4	44	60	3	4	6	72	98	5	6
23	(Central)	66	8	45	57	1	10	12	64	86	2	15
24	Galesburg, Ill .	125	27	98	118	16	47	21	79	94	13	37
25	Rockford	48	9	34	44	15	5	18	71	01	31	10
26	Evanston	40	9	34	44	-3	3	-	-	,-	3-	
20	Township	66	7	46	63	10	21	11	70	95	15	31
27	Goshen, Ind	20	2	16	20	0	0	10	80	100	0	0
28	Terre Haute	44	1	24	39	7	22	2	54	88	16	50
20	Indianapolis	44	-	-4	35	,			3 .			
~ 49	(Manual)	62	5	45	43	5	13	8	72	60	8	21
30	Indianapolis		0	43	45	3	3					
3-	(Academy)	68	8	50	63	5	31	10	73	92	7	45
31	Leavenworth,											
	Kan	26	5	26	23	5	10	19	100	90	19	38
32	Lincoln, Neb	40	7	35	39	10	7	17	87	97	25	17
33	Crete	36	2	13	32	I	12	6	36	- 88	3	33
34	Nebraska City.	26	0	21	26	0	3	0	78	100	0	11
35	Fresno, Cal	15	3	7	12	2	6	20	47	80	13	40
36	Belmont	10	1	5	IO	0		10	60	100	0	
37	Brockton	23	3	12	14	3		13	52	61	13	
38	Brookline	33	X	26	33	2		3	78	100	6	
39	Cambridge (English)	51	9	42	50	16		18	82	98	31	
40	Cambridge	6.							63	86	14	
	(Latin)	63	2	40	54	9		. 3	61	84	24	* *
41	Chelsea Fitchburg	56	. 5	34	47 36	15		12	60	81	7	* *
42	Gloucester	43	5 I	30	24	3		3	75	65	5	
43	Lowell	37 83	0	76	61	7		11	QI	73	8	
44	Lynn (English)	102	27	64	95	15		26	63	93	15	
45 46	Lynn (Latin)	44	7	32	42	5		16	73	95	11	
47	Malden	18	2	11	16	3		II	61	80	17	
48	Medford	54	14	33	46	17		26	61	85	31	1
40	Melrose	34	3	20	33	0		9	85	98	0	
50	New Bedford	41	4	35	41	7		10	85	100	17	
51	Newton	42	5	32	38	12		12	76	90	28	
52	Quincy	55	I	45	48	3		2	82	87	5	
53	Salem	52	0	27	37	2		0	52	71	3	
54	Somerville	87	9	69	69	0		10	79	79	0	
	Grand total	2485	302	1852	2162	285	511	12.1	74.5	87.	11.4	20.5

Of the 2,485 students who replied to these questions, 302, or 12.1 per cent., replied that they had been influenced in their choice of studies by temporary interest due to the recommendation of other students; 1,852 or 74.5 per cent., replied that their choice of studies had been determined wholly or in part by the advice of teachers,

TABLE IV
HIGH SCHOOLS IN EASTERN MASSACHUSETTS

City	Total No. of Pu- pils Replying	No. Replying	Per cent.	Total No. of Af- firmative Re- plies						
Belmont	10	1	10	6	60	10	100	0	0	17
Brockton	23	3	13	12	52	1.4	61-	3	13	32
Brookline	33	1	3	26	78	33	100	2	6	62
Cambridge (Eng. High)	51	0	18-	42	82	50	08	16	31	117
Cambridge (Latin)	63	2	3	40	63	54	86-	0	14	105
Chelsea	56	5	9-	34	61-	47	84	15	24	IOI
Fitchburg	43	5	12-	30	60	36	18	3	7-	74
Gloucester	37	I	3-	28	75	24	65	2	5	55
Lowell	83	9	11-	76	91+	61	7.3	7	8	153
Lynn (Eng. High)	102	27	26	64	63-	95	93	15	15-	201
Lynn (Latin)	44	7	16	32	73-	42	95	5	II	86
Malden	18	2	11	II	61	16	89	3	17-	32
Medford	54	1.4	26 -	3.3	61	46	85	17	31	110
Melrose	34	3	9-	29	85	33	98	0	0	65
New Bedford	41	4	10-	35	85	41	100	7	17	87
Newton	42	5	12-	32	76	38	90	12	28	87
Quincy	55	ī	2-	45	82-	48	87	3	5	97
Salem	52	0	0	27	52-	37	71	2	3+	66
Somerville	87	9	10+	69	79	69	79	0	0	147
Total	928	108	11.6	671	72.3	794	85.5	121	13	1694
"No," or not replying		820	88.4	257	27.7	134	14.5	807	87	2018

Has your choice of studies been determined by any of the following reasons:

		"Yes"	"No" or Unanswered
a) b) c) d)	Temporary interest due to the recommendation of other students	11.6% 72.3 85.5	88.4% 27.7 14.5 87.0

parents, or guardians; 2,162, or 87 per cent., replied that they had deliberately chosen all or the greater part of their studies in accordance with their own tastes; 285, or 11 per cent., replied that in one or more choices they were influenced by the desire to avoid difficult subjects.

TABLE V

Showing the Number of Elections in Each of Twenty-eight Subjects for Each of Nine Public High Schools of the City of Boston

No. of Pupils	Boston High Schools	English	History	Civil Gov-	Commercial	Economics	Latin	Greek	French	German	Spanish	Algebra	Geometry	Higher Math- ematics	Biology
291	Brighton	273			8	12	113	11	143	50	7	98	47	12	51
226	Charlestown	175	96	13	13	0	23	0	121	17	0	40	4	87	33
1078	Dorchester	1030	535	54	67	14	318	0	672	203	23	244	71		263
424	East Boston	402	297	0	27	0	83	5	209	23	0	107	32	26	118
834	English High	818		48	81	10	88	0	571	104	28	437	133	61	25
898	Girls' High	972	855		0	0	194	0	622	142	0	218	164		361
533	South Hoston	522		5	0	0	103	5	248	83	64	161	35	13	337
671	Roxbury	652		0	30	0	123	34	334	263	0	222	80	0	302
363	West Roxbury	357	282	0	7	0	107	7	301	61	0	132	48	30	55
	Total	5201	3194	222	232	36	1154	62	3093	945	122	1659	603	240	1129

No. of Pupils	Boston High Schools	Commercial	Physiology	Physical Geography	Physics	Chemistry	Astronomy	Drawing	Bookkeeping	Phonography and Typewriting	Household Art	Music	Gymnastics	Military Drill	Hygiene
291	Brighton	11	33	0	7	14	2	114	84	135	22	250		80	117
226	Charlestown		8	9	9	11	0	103		86	0	179			107
1078	Dorchester	67	30	15	136	100	0	366	446	205	0	834	630	305	
424	East Boston	27	30		17	77	0	130	193	116	0	392	314		
834 898	English High	81	0	0	69	62	0	256		238	0	187			
	South Boston	46	77	0	130	91	14	347	397	157	0	826			
533		37	10	0	18	58	9	261	131	200	0	451		150	
671	Roxbury	0	26	2.4	3.1	137	0	376	237	297	45	360	480	138	
363	West Roxbury	0	0	23	37	56	0	110	110	68	16	266	237	81	323
	Total	269	223	87	424	615	25	2045	2117	1502	83	3745	3353	1621	3112

Of the 1,557 pupils in the first thirty-five schools included in Table III, 511 (that is, about one-third) gave, in reply to question *e*, various motives for choice which may be included under the general term "vocational needs."

The record of this investigation in the public high schools of eastern Massachusetts, which is given separately in Table IV, shows results almost exactly the same as those derived from the whole number of schools in Table III.

Regarding the extent to which pupils are influenced in the selection of studies by the action of their associates, a comparison of the programs of one class of pupils for four years gives good evidence.

TABLE VI
Table for Nine High Schools of Boston (1903-4)

	Per Cent. of Offerings	Per Cent. of Electives
English	8.5	19.7
French	8.6	13.4
Mathematics	0.0	10.3
Bookkeeping	4.0	9.8
History	7.0	9.2
Phonography and typewriting	9.8	8.3
Drawing	* 7.1	6.2
Latin	9.7	5.3
Biology	3.5	4.7
German	7.4	4.0
Chemistry	4.5	2.8
Physics	3.5	1.8
Commercial Geography	1.2	0.7
Commercial Law	1.4	0.6
Physiology	0.4	0.5
Manual training	0.4	0.5
Civil government	1.2	0.5
Spanish	3.6	0.5
Greek	3.7	0.3
Physical Geography	1.1	0.3
Household Art	0.8	0.3
Astronomy	0.9	0.1
Economics	1.0	0.1

For this purpose take the high school of Galesburg, Ill. The 125 reports sent to the Harvard Education Seminary by the members of the senior class of this school exhibit 119 different programs of study; they seem to show independent, deliberate choice.

The 2,485 pupils represented in Table III gave copies of their programs of study for each year of their high-school course. An examination of those few reports which gave temporary interest or the desire to avoid difficult subjects as motives for choice showed that the resulting programs of study differed but little from the programs of other students. In such a large number there were undoubtedly some mistakes, yet, in the opinions of the principals, so far as those opinions were given, all the programs were better suited to the individuals than any one prescribed course could be.

As to the value of these replies from students there may well be difference of opinion. My own belief is that the reports as a whole may be taken as the honest, careful judgment of each individual as to the motives which determined his choice of studies. The replies

were collected and tabulated by men of varied opinions regarding the elective system, who were not striving to make the reports read one way or the other. Furthermore, wherever the student gave as a reason for choice the desire to avoid difficult subjects, the choice was not one that could be condemned without a knowledge of the individual pupil. For example, one pupil said frankly: "Took German instead of Latin; it was easier, and I always like to have things as easy as possible." Shall we say that even this was *surely* an unwise choice? Not if the elective system is offered with its necessary proviso, that what a boy chooses, that he must do well.

The table of replies is not exact, and the significance of the investigation cannot be given in figures. It was not always easy to determine what the student tried to say. Here, for an extreme instance, is one reply to the question concerning motives for choice:

Contrary to the recommendation of my A grammer teacher I choose the English course in preference to the Latin course because of the advice of my father and in accordance with my own tastes because I had determined to give my time and attention and energy to art after I graduated and I thought Latin unessential for such a course and thus laid greater stress on Mathematics. [What could the boy have studied in the English course!]

How can it be that nearly all of these 2,485 elected programs of study are apparently better for the particular pupils than any prescribed course could be? Why are not these programs "freaky," disconnected, or unduly specialized; why do they not go far astray? The reason is that pupils are protected from unwise choices by many natural safeguards. This the opponents of the system have admitted in urging that absolutely free choice is not possible. To be sure, it is not. So, when such a strenuous opponent as Mr. W. J. S. Bryan, of St. Louis, points out the inherent difficulties in the way of free choice, he slips over, apparently unwittingly, to the goodly company of elective-system advocates. The system, as it is and must be administered, is protected in many ways.

Of these natural safeguards there are at least eight worth mentioning. Each points the course through safe channels; together they prevent the wrecks which are feared. First, of all there is the advice of teachers and parents, which no system can eliminate. Happily such advice becomes more and more intelligent, more and more valued by pupils, hence more and more effective in preventing mis-

takes as the chances for election increase. There is also powerful tradition concerning studies, which exerts such influence that nearly all are loath to stray far from blazed paths. There is the capacity of the pupil—physical and mental—which limits the number of possible choices. There is the fixed number of school hours per day, which restricts the scope of school programs. There is the limited teaching force, which cannot undertake to teach "fringe" courses elected by the scattering few.

Still another restriction affects an increasing number of students—the entrance requirements of higher institutions: students who find their work laid out for them in college catalogues have only restricted options. Another safeguard lies in making choice deliberate: pupils on graduating from grammar schools are asked to consider what they will study in the high school. Pupils already in the high school are asked to choose tentative programs for the following year, and during the long vacation they have time to think over their choices. At the opening of the school year there are conferences, that the pupils may not go about their work blindly.

Beyond all these safeguards there is one of even greater importance—the exceedingly restrictive limitation due to the sequence and dependence of studies, not a human, but a divine principle. A pupil cannot elect second-year Latin before he has completed the beginners' course; he cannot pursue higher mathematics without the foundations; other courses he cannot elect until he reaches the year in which it is deemed wise to offer them. Ah, but does not such restriction destroy the elective system? On the contrary, without these natural safeguards there would be nothing we could properly call a "system." Hedging electives in this way is not abandoning the principle; it is offering guidance precisely where guidance is most needed—in order to protect rational choice, and destroy the chance for "crazy patchwork."

In the advice of friends, in tradition, in physical and mental limitations, in the number of hours and the number of teachers available, in college requirements, in deliberate choice, in the laws of dependence and sequence applied to the order of studies—in all these ways, and more, nearly every pupil is amply protected from the dangers of foolish choice.

In urging the inability of pupils to choose wisely, the opponents of the new system often employ amusing illustrations which prove nothing, and false analogies which are unfortunately accepted by a prejudiced public as substitutes for evidence and reason. A fair example of this kind of talk is the following editorial article from a Chicago paper;

The average high-school boy has hardly got beyond the period when he is puzzled to decide whether he will be a general, an admiral, or a circus clown. To throw open a course of study to the election of such immature minds would be as edifying a spectacle as to allow an infant to experiment with different-colored candies, for the similitude could be extended to the ultimate effect on brains and bowels.

This quotation was deemed worthy a place in the report of the National Educational Association for 1900 (p. 435). It is the kind of argument which is constantly urged against the elective system. Yet the first sentence not only assumes that there is such a being as "the average high-school boy," which, for the purpose at hand, not all of us are ready to admit, but it also begs the entire question as to the maturity of high-school pupils. The second sentence, making no distinction between infancy and adolescence, employs a false analogy. This would seem to be fallacy enough to pack into one brief quotation, but a little thought will discover yet another false assumption-that the elective system offers the child much that is useless or really harmful, as the colored candies are assumed to be. The truth is that if any curriculum embraces studies which are useless, or harmful, or prematurely offered, the fault is not with the elective system, but with those who allow such studies any place in the program.

More than all this, such fallacious argument emphasizes a positive virtue of the system it decries. The history of education and the present varied and rapidly changing ideas concerning the essential studies show the probability of many mistakes in school programs. The studies may be ill-timed, ill-suited, or ill-taught—note that. Under either system some errors must be made. The question is whether we shall impose these on all alike, or leave open the possibility of avoiding them. Which are worse, the mistakes of a few persons, or mistakes which are prescribed for all? The latter are like

the rain of heaven, not in its gentle quality, but in falling on the just and the unjust. There is no escape. Prescribed errors ravage not only the dull, lazy, shiftless boys and girls—who are not to be harmed much by anything in education—but also the bright, the energetic, the mature. Public educational enterprises should be managed not primarily for the customer who is looking for a chance to toss his precious bundle under the counter and run out, but for the one who is determined to have the best in the store for his particular needs.

It must be conceded that the training in the choice of studies, like every form of training in independent action, leaves open some chance for error. The elective system does not pretend to stop all educational mistakes and wastes; but the monstrous prescribed mistakes and wastes of the old system it reduces to a minimum.

The objection is raised that the foolish pupils will choose "favorite teachers" in preference to necessary subjects; here is another chance for them to go astray under the elective system—although it must be admitted that to popular teachers this danger seems slight. How, indeed, can we have any faith in an objection which is founded on the necessary study fallacy? Beyond that foundation the objection contains nothing except a distinct merit of the new system, for the election of teachers is often more important than the election of studies. All honor to the system which enables a boy or girl to escape a hated teacher—a teacher who may instil in that particular pupil aversion to all study. Let him choose his "favorite teacher," whatever the subject may be.

My personal experience in choosing a teacher regardless of the subject she taught is not exceptional. In the high school I elected a course in history for the sake of getting closer to the teacher. At the end of the year it would have puzzled me to remember what the course was about, except that some queen or other was or was not justified in killing some other queen, who was very beautiful. But one purpose I did grasp so firmly that it has not escaped: through the influence of that teacher I came to feel the value of a higher education and a life worth living. Shall we call that course a failure because I learned merely that I wanted to do something well? Or shall we deem it a wise system which allows the pupil to choose his favorite teacher?

We have now to consider the propositions of those who seek for compromises between the elective and prescribed systems which will secure the good and eliminate the evil of both. The group system is suggested. It began by offering two courses, one called "classical" and one called "scientific." Soon a "business course" was introduced, and, in many schools, an "English course," so called apparently because it especially neglected English. The number of groups multiplied until in some schools (the Detroit High School is an example) nine courses were offered—nine distinct groups. Most significant of all is the argument that the group system is not too rigid, since, by special permission, a pupil who has elected one group of studies may make substitutions from other groups. A good plan, indeed! But what has become of the system? When its only distinct feature, namely, the lines between the groups, is abolished, there is left only the elective system.

The faults with the group system are that the units of choice are too large, and it attempts to enforce specialization. The tendency is always toward the multiplication of groups—a happy tendency, say the friends of the elective plan, for a group system so far differentiated as to provide for the needs of each student is an ideal system. It offers the ideal program, which must be an individual program.

Another proposed plan is partial election. Prescribe the main substance and allow the pupil to choose the fringe. The main fault with this suggestion has already been discussed; to one who believes the propositions above defended a system of partial election seems a farce. However important the trimmings may be, the student has a right to cut out the cloth of his education; he has a right to do this when he is hesitating, with a grammar-school diploma in his hand, between earning a few dollars a week as an unskilled workman and entering the high school. Furthermore, elective and prescribed studies side by side are not easily compatible; each brings out the worst features of the other.¹ Partial election will not suffice.

<sup>&</sup>quot;Prescribed studies, side by side with electives, appear a bondage; elective, side by side with prescribed, an indulgence. So long as all studies are prescribed, one may be set above the other in the mind of the pupil on the ground of intrinsic worth; let certain studies express the pupil's wishes, and almost certainly the remainder, valuable as they may be in themselves, will express his disesteem."—Professor George H. Palmer, The New Education.

The third division of our issue concerns the effect of the elective system on teachers. It is notably good. Give the pupils a chance to choose, and you have given teachers a chance to see the effect of their work, and schools a chance of ridding themselves more easily of inefficient teachers. Under the prescribed plan, an intolerant, sluggish, unprogressive teacher is annually apportioned a roomful of victims, regardless of their mental attitude toward their persecutor. The elective system tends to force such persons to become better teachers or leave the profession.

The elective system demands the devotion and sympathy of teachers and principals. It requires much conference among teachers, parents, pupils, thus offering incentives to personal contact, which incentives are deplorably lacking under a fixed régime. The pupil sees at the start that his teachers, who are helping him to plan a course with his own highest interests in view, are true friends, worthy of his confidence and his gratitude. Far from being a *laissez-jaire* policy, the free-choice plan demands the highest ability of teachers and increases their responsibility.

To good teachers this added responsibility means added pleasure. To come into more sympathetic relations with the adolescent mind, to become counselors and friends in the highest sense, to treat individuals always as individuals—to do this is to gain the legitimate reward of every workman, joy in labor. The system which contributes most largely to this reward is the one which tends to abolish the worn treadmill, the taskmaster, and reluctant, forced pupils—the system which discovers and respects the individual.

We come now to the moral argument. At once we meet the drudgery theory which holds that it is good for boys and girls, who are naturally inclined to rebel against authority, to be compelled to do work which they dislike, in order to learn submission to the external order of things. Such is the conventional moral defense of prescribed studies. Many teachers are like bicycle dealers who should persist in offering nothing but solid tires, with the idea that pneumatic tires are immorally easy. Many schools are still run on hard tires.

The elective system is morally defensible because it honors the will and stimulates the interest, willingness, sense of responsibility, and enthusiasm of pupils as no compulsory system can. When a pupil is studying physics because he likes it, because of personal interests or mental aptitudes, he puts his heart into the work. In no other way can he make it excellent. Mechanical diligence, passive docility, unreasoning acceptance of commands, patient drudgery—these may be fostered by the whip, as they were in slave ships of old; these may be cultivated in some pupils by the old prescribed curriculum. But the aim of modern education should be to replace these qualities by spontaneous attack, interest, reasoning choice, enthusiastic work.

The elective system makes the student conscious of what he is doing, trains him in independent choice, and so uplifts his character. In pursuing his own ideal, there is moral worth, even though there be no pot of gold at the end of the rainbow; but in submitting to overwhelming force, there is no moral worth. Comenius told us all this long before it had practical application in our schools. He said:

The attempt to compel nature into a course into which she is not inclined is to quarrel with nature and is fruitless striving. Since the servant is the teacher, not the master or reconstructor of nature, let him not drive forcibly when he sees the child attempting that for which he has no skill. Let everyone unhindered proceed with that to which, in accordance with the will of heaven, his natural inclination attracts him, and he will later be enabled to serve God and humanity.

As a last argument in favor of complete election for the public high school, we may note its adaptation to several needs of modern democratic communities. First, it attracts more pupils to high schools and keeps them longer there. The emphasis on those studies usually deemed the foundation of a liberal education prevents the public high school from being truly public. If it is to belong to the people, it must serve them regardless of the demands of higher institutions. The public high school is not primarily to prepare pupils for higher schools. According to the latest report of the United States commissioner of education, of the total enrolment of American students-public and private, elementary, secondary, collegiate, normal, law, medical, theological, technological-94.38 per cent. were in elementary schools, 4.21 per cent. in secondary schools, and 1.41 per cent. in all the rest put together. Of every hundred pupils in America, ninety-four do not reach the high school; of every hundred high-school pupils, only eleven are prepared for college. The public high school should aim to secure more than 4.21 per cent. of the school population, and should provide primarily for the large

majority of pupils who will never enter higher schools. There should be laid out a straight road to college, but there should also be roads leading to the various lives which various pupils are to lead. So

much is commonplace.

"The higher education," says Lord Kelvin, "has two purposes: first, to enable the student to earn a livelihood, and, second, to make life worth living." An industrial democracy which neglects either of these functions fails to accomplish the purpose of education—to make men and women as useful and as happy as possible, to prepare for "complete living." Consequently, in spite of the defenders of the classics, who warn us to beware the utilitarian spirit of the age, modern schools have discarded the programs of ancient and mediæval times as wholly unsuited to the present needs of the majority of the people. To the 94 per cent. of pupils who believe that they cannot afford four years at high school, something should be offered at the start which clearly will be of value to them in the coming life-work.

Complete election in the first year of high school surely increases the attendance. Evidence is on every hand. Two years after the introduction of the new system in the public high school at Galesburg, Ill., the school building had to be more than doubled to accommodate the applicants for admission. Formerly one pupil out of eleven in the lower schools entered the high school, and thirty-six graduated; two years later, one out of five entered high school and ninety graduated. The one great cause of these increases was the elective system.

There is another important advantage of the elective system which is frequently overlooked. Many are kept in school through the entire course who do not take the college preparatory studies, but who afterward decide to go to college. The pupils thus influenced to continue their education would early have been driven out of school, had they not been permitted to elect a course which seemed to them suited to their needs.

Having already carried this paper to what may seem an unnecessary length, I shall not add a detailed conclusion. The sixfold argument in favor of the complete elective system in public high schools, which it has been my purpose to prove, is carefully outlined in the introduction. To that I refer the reader who desires a summary of the whole argument.

# EDITORIAL NOTES

#### GEORGE HERBERT LOCKE

It is right to judge results, not by the aggregate amount of achievement, but rather by the amount after there have been taken into consideration the obstacles

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FORWARD
MOVEMENT IN
SECONDARY
EDUCATION IN THE
SOUTH

that were overcome. The traditions and environment in some sections of our country are such that if an association of educated men cannot make substantial progress, it is plain that the responsibility is theirs; in others it is a constant struggle with limited means and indifferent, if not hostile, traditions. It is in this latter

class that we must place the people in our southern states who are endeavoring to make substantial educational progress. As we have pointed out in former issues, the greatest force at work in the regeneration of secondary education in that section of our country is the Association of Colleges and Preparatory Schools of the Southern States. Without disparaging in any way the great work of similar associations in the New England states, the Middle states and Maryland, and the North Central states, it is worth while to consider carefully the situation confronting each association when it began its work. Judged by this standard the association in the southern states shows remarkable progress. Most of our associations are deliberative bodies, but this is legislative also, and, having decided upon certain educational practices which are deemed essential to progress in secondary education, it inquires annually of its institutional members whether the institutions which they represent have observed the letter and the spirit of these standards. If there has been transgression, the consensus of opinion seems to be that the transgressor has by his act separated himself from association with those who are working for better things, and he is treated accordingly. This means that there is a solidarity about the association that makes for power and progress.

Its first great reform was the abolition of preparatory schools in connection with colleges and universities. These lowered the intellectual tone of the college and prevented the legitimate secondary schools, whether private or public, from growing properly. This was a bold step at that time, and the number of so-called college students decreased. But this diminution in numbers lasted at the most only two years, and ever since there has been an upward trend. This is but natural, for when the universities ceased to be rivals of the preparatory schools, as they had been in maintaining a preparatory department, there at once developed a community of interest between the schools and the universities, and from this unity there came the strength of this great association. And so we might

read the proceedings of each annual meeting and discover some distinctly educational advance each year. The motto seems to have been:

> "Where the vanguard camps today The rear will camp tomorrow."

The meeting last autumn was remarkable for a still greater advance toward unification of effort and raising the general intellectual standards. The following resolutions will best explain the temper of the meeting. These were offered by a committee appointed at the regular meeting of the association in 1903, "to consider the advisability of instituting a plan of furnishing uniform examination questions to those schools of the South which prepare students for college and which are willing to take these questions for their examinations."

Resolved, That the president be requested to appoint a committee of five from those present—at least one, and not more than two, of whom shall be representatives of secondary schools—which committee shall be known as the "Entrance Examination Committee of the Association of Colleges and Preparatory Schools of the Southern States."

Resolved, That the several colleges in the southern states be requested by this association to give to this committee such information as it may desire, and such support as the several colleges may see fit, and to accept such examination papers as may be sent them, properly vouched for, on questions set by this committee, at their face value, the same to be sent for grading by mail, sealed, to the institution the applicant wishes to enter.

Resolved, That it shall be the duty of this committee (1) to draft rules and regulations for the examinations; (2) to canvass the colleges in the southern states for a full and accurate statement of their entrance requirements; (3) to make an estimate of the cost of printing questions and to secure advance subscriptions for the same; (4) to meet in Atlanta, Ga., or some other central point, in December or January, and to prepare a full report for publication in the minutes of this meeting.

Resolved, That if, in the judgment of this committee, there is sufficient interest to justify such action, it proceed to map out the general limits of the examinations, which, as to topics and thoroughness, shall be so graded as to embrace the varying requirements of the different institutions; and that in each subject it shall appoint three examiners, who shall be requested to confer by letter and prepare such an examination as shall comply with the requirements stated by this committee, and send the same to the secretary of this committee not later than March 15.

Resolved, That each of the supporting colleges be requested to hold an entrance examination at its institution at the time fixed by this committee, it being understood that this examination will in no case prevent other examinations which any institution may wish to hold.

Resolved, That two members of the Entrance Examination Committee shall be replaced each year by the president of this association, and that the new members be selected from colleges and schools not then represented on this board.

Resolved, That in 1905 and thereafter this board and the committees to prepare examinations shall meet in November at the place appointed for the meeting of the association, on the day before the date fixed for the meeting of the association, and then and there make all necessary arrangements for the next examination.

Resolved, That this association meet the initial expenses of the Entrance Examination Committee for stationery, printing, and postage, and that their respective colleges be requested to pay their traveling expenses.

It is plain that this plan was suggested by the great success of the Entrance Examination Board of the Middle States and Maryland, but it is equally plain to anyone acquainted with conditions in the South that the financial details could not be the same. Therefore the association and its members have undertaken to assume the burden, educational and financial, that the much-desired reform may take place. Here is a place where some person interested in educational progress could by a comparatively small gift make possible a great reform.

The committee recognizes that it is doing pioneer work and in its circular states that "any educational reform of importance takes time, patience, and sacrifice on the part of those engaged in it." The outlook is encouraging, for within a month from the issuing of the invitation to join in this movement thirteen colleges and five schools accepted. The chairman of the committee, Professor Paul H. Saunders, of the University of Mississippi, sent out a circular to the members of the subcommittees, some paragraphs of which so aptly describe the high ideals, and at the same time the thoroughly good business practice, that we reproduce them:

The committee appreciates the fact that the instructors in our southern institutions have full work, and that even a slight addition like this may prove a burden; but it feels that this is, in a measure, missionary work, and believes that you will so consider it and willingly perform the duties thus imposed without other compensation than the consciousness that all are working together freely for the betterment of the educational conditions in the South. No one connected with this movement receives any compensation for the work done.

I inclose an outline indicating how the examinations are to be divided, what ground is to be covered in each subject, and how much time will be allowed students on each subject.

I beg leave to call your attention to two points which probably would have occurred to you: The examinations are to be set, not for college students, but for the pupils of the secondary schools having different teachers and textbooks; one of the purposes of these examinations is to tone up and improve the standard and thoroughness of the secondary schools, and while they should not be so difficult as to discourage, they should be sufficiently thorough and scholarly to inspire and stimulate, teachers and pupils, leaning in this direction rather than toward too elementary tests. The chairman of each committee has been sent specimen examinations from various institutions, and he is requested to prepare as soon as possible a first draft of the examinations and send to the other members of his committee; they will at once make such criticism and suggestions as they see fit, prepare additional questions, and return to the chairman, who will then make the final draft and resubmit to his committee, if time permits.

The Council of the National Educational Association at its meeting in 1903 appointed a committee to investigate the salaries, tenure of office, and pension provisions of teachers in the United States. This was in response to a growing demand for a critical study of the position of teacher in comparison with that of

other wage-earners whose vocation demanded an approximate amount of preparation. The result of this agitation is that we are accumulating some interesting statistics, and at least one educational journal has devoted THE SALARIES OF TEACHERS IN OUR a department to the dissemination of useful information on this HIGH SCHOOLS particular subject. The state superintendent of public instruction in Indiana, Mr. F. A. Cotton, published the results of his investigation into conditions in his own state in one of his useful pamphlets which, like Elbert Hubbard, he distributes every little while. This stirred up much interest in Indiana, and Mr. George W. Benton, principal of the Shortridge High School in Indianapolis, undertook an investigation into the salaries of teachers in high schools. These results he presented in a paper read before the Town and City Superintendents' Association of Indiana and published in full in the Educator-Journal. In his own state the high schools are divided into commissioned and noncommissioned, according as they have been accepted as fulfilling the conditions laid down by the state board. This system corresponds to the method of accrediting which is in vogue in connection with our state universities. The average yearly salary in a commissioned high school is \$726, and in a non-commissioned school, \$432. Mr. Benton quotes from Mr. Charles A. Gardiner, of New York city, that in 1902 the average yearly salary of high-school teachers in New York state was \$729. This is a poor showing in comparison with such trades as marblecutters, bricklayers, plumbers, metal-lathers, and stonesetters, whose average earnings range from \$902 to \$1,500. Mr. Mosely, who organized the famous commission that visited us last year, when reporting his impressions, said on this point that the people of this country are spending a marvelous amount of money on their public-school buildings and equipment, but are not paying adequate salaries to those who are giving the instruction. Were the pay in our high schools better, we should not be losing so many good men each year to insurance, bookselling, and other more remunerative business occupations. Mr. Benton has felt the pressure when as principal of a high school he is forced to look about for first-class teachers to supply the places of those in his own school who have deserted the profession. If this is the situation in such a good school as the Shortridge, what must be the lot of the principal or superintendent in a small town! We are trying to build up a professional spirit in our high schools, and are preaching vigorously that the teacher should have a special training for his work. To those of us who are engaged in this occupation, and who believe that the interests of the children ought to be protected in this way, the present situation in many of our towns is very disheartening. We cannot urge men of ability and power to enter upon a profession and make it a life-work when the remuneration is so much less than they could earn in any other occupation that demands equal preparation. Mr. Benton urges the consolidation of high schools, instead of the present tendency toward multiplication, and he certainly proves his point that such a course would lead to better salaries, better teaching, and thus a better chance for the children. He looks at this from a very practical standpoint when he urges that the making of good roads would hasten this, and that for the construction of these it would be wise to employ convict labor rather than use that labor, as is now being done, to manufacture articles that will compete with honest labor. He advocates the township high-school system which has been such a great success in Illinois. We append some interesting statistics which he gathered from various cities:

STATISTICS GATHERED IN SEPTEMBER, 1904, ON HIGH SCHOOL SALARIES

Cities	Teache	rs	Principals
Albany, N. Y	\$700-	\$2,500	\$3,000
Boston	600-	3,060	3,780
Buffalo	450 W	900	2,500
Baltimore	900-	1,500	2,400
Cincinnati	1,200-	2,000	2,600
Chicago	850-	2,000	2,500-3,000
Cleveland	1,000-	2,200	3,500
Detroit	700-	1,200	2,600-3,500
Denver	800-	1,900	
Evansville	800-	1,000	1,800
Ft. Wayne	600-	1,300	2,000
Grand Rapids	1,200-	1,400	2,400
Kansas City	800-	1,800	2,200-3,300
Louisville	900-	1,800	2,500
Minneapolis	650-	1,500	2,300-2,700
Milwaukee	900-	1,700	2,500
Newark, N. J	800-	2,300	3,500
New York city	W. 700-	2,500	
New Tork City	M. 900-	3,000	3,500-5,000
Omaha	760-	1,235	3,000
Providence	600-	1,600	2,500
Pittsburgh	700-	1,500	3,500
Philadelphia	W. 1,050-	2,000	
rmadeipma	M. 1,050	-2,500	2,400-4,000
St. Louis	688-	2,064	3,500-3,600
Springfield, Mass	600-	2,200	2,700-3,500
Syracuse, N. Y	550-	1,500	3,000
l'oledo	600-	1,500	1,800-2,000
Utica	750-	1,500	2,700
Washington	500-	1,500	1,800
8 cities, average	\$762.42-1,8	16.30	\$2,721.44-3,400.00

The eighteenth annual report of the State Board of Education of Massachusetts has just been submitted to the legislature and contains many interesting suggestions in addition to the usual array of statistics. There were enrolled in the public schools in the year 1903-4, 494,042 pupils; average membership, 431,361; average attendance, 91 per cent., or 391,771. The records show an increase in the above items of 8,559, 7,558, and 3,155, respectively. The latter increase is a decided falling off from that of the preceding year, which was 8,590. The total number of pupils in the evening schools is 43,780—an increase of 4,595. The interest in

evening schools seems to be growing, says the report. The expenditure on public schools was \$16,436,667, of which \$2,642,075 was for new schoolhouses.

The principal recommendations are: that the terms of evening schools be lengthened; that the educational forces of the state be unified under the lead of the secretary of the State Board of Education; that the minimum length of the high-school year be fixed at thirty-eight weeks; that the wages of teachers be increased; that retirement funds for teachers be made more general; that a third year in the normal schools be used half for practice under active school conditions, and half for intensive study on one or two subjects to improve the scholarship; that a state normal school be established to qualify teachers for high schools; that the office of school superintendent be made more attractive by extension of authority and greater security of tenure; that music be made a more substantial study in the high schools; that the study of physiology and hygiene be broadened to include the hygiene of the home and public hygiene; that the teachers of each town and city organize themselves for the study of school principles and practice.

The paternalism of the emperor of Germany has its distinctly good side, and his interference on behalf of educational reforms has always been productive

SIZE OF CLASSES IN THE SCHOOLS OF GERMANY of beneficial results. A few months ago we commented upon his effort to unify the work of the different grades of secondary schools so that work properly performed in one would receive corresponding credit in another, a distinct advance in German

education. The latest of his investigations is concerning the size of classes, and he condemns strongly the tendency to have seventy or more children in charge of but one teacher. It seems that there is a great opportunity for reform in this important part of educational organization, for the reports published in 1901 show that in Prussia alone there were 949 schools with from 71 to 100 children in charge of one master; 685 half-day schools reported 120 and more children to a single teacher, most of these schools being in the Polish provinces. In 5,048 schools with two or more teachers there was an enrolment of between 71 and 100 for each teacher; in 89 schools with one teacher, and in 415 schools with two or more teachers, each had charge of 121 to 150 pupils; and in one school with one teacher, and in two with more teachers, the enrolment for each was more than 150. It seems that some 19,653 teachers, or fully 22 per cent. of the total corps, suffered from this unreasonable state of educational affairs. The investigation has shown single instances which are almost beyond belief, as, for instance, that schools with enrolments of 130, 140, 166, 168, 180, and 188 students under one teacher are tolerated and in Dozonowo, district of Kulm, there is one with 201 children. Notwithstanding the ardent admiration of some of our traveling educationists for what they think German education is and does, it seems as if there are still many problems to be solved ere the Germans are satisfied with their own conditions.

The report of Mr. Jordan, superintendent of schools in Minneapolis, shows that there was a decided increase in attendance in the high schools of that city

THE PROGRESS IN SECONDARY EDUCATION IN MINNEAPOLIS during 1903-4. The accommodation is so limited, and the prospects for increase in building so distant, that the superintendent proposes to put the high schools on two sessions, viz.: from 9 to 12 A. M. and from 2 to 4 P. M., with a recess of twenty minutes

in the forenoon and no recess in the afternoon. It looks as if Mr. Jordan is aware of the many disadvantages of such a plan, and will not try to put it into operation unless the situation becomes exceedingly grave. He points out that under such a plan it would be necessary for many of the children to do their studying at home, instead of in the schoolroom, and using the school as a place merely for recitation of lessons. There are other reasons, but none can be as important as this, for it encourages that very erroneous idea of a school which has hindered true educational development. There are 126 teachers in the high schools, 27 of whom are men, and 99 women; the boys number 1,527 and the girls 2,060. In the first year the were 1,477; in the second, 905; in the third, 701; in the fourth, 504. It is interesting to notice that in the graduating class there were 191 boys and 303 girls, which shows that the boys survive much the better. The statistic showing ages of admission make it evident that in the schools of this city the tendency to enter the high school at an early age seems not very pronounced. One was admitted at 12, 80 at 13, 369 at 14, 724 at 15, 921 at 16, 749 at 17, 437 at 18, 213 at 19, 61 at 20, 20 at 21, and 12 at an age over 21.

## CORRESPONDENCE

#### MR. BROOKS ON POETRY

To the Editor of the School Review:

MY DEAR SIR: In Mr., Brooks' article on "The Æsthetic Value of Poetry" in the November number of the School Review he strikes a note which will find an immediate echo in the minds of those who are interested in that side of education which directly promotes cultivation and refinement. It is a part we are neglecting, and a part that many parents think cannot be obtained in our public schools, where everything must first of all be practical. In reading Mr. Brooks' remarks on the teaching of poetry in the schools one is strongly moved to call "Hear! Hear!"

It is not necessary in these days to occupy time with a discussion whether or not it is desirable to teach poetry to children. Without such teaching they have been defrauded of much. It is the same with music and drawing, though the latter was a hard-won fight. The memorizing of standard poetry in the good old way is not only a first-class mental discipline, but, rightly taught, is a pleasure and delight in after life. We see the fruits of an early intelligent study of poetry in the scholarly mind of Dr. William Everett and the silver speech of the late Senator Hoar. The rare old gentleman who has the whole range of English hymnology at his tongue's end has seen the world with different eyes from him who never heard of Addison, Cowper, and Bishop Heber. He who knows the poets will always have a friend at hand with whom to enjoy the beauties of nature. The study of poetry directly makes for cultivation. How can the love of such study be taught?

The love of poetry or art or music is not taught by our modern methods. In fact, these methods are death to such love. Our children emerge from the process despising all poetry, and quite likely to announce that King Arthur wrote The Idylls of the King, and that Beowulf and the Vicar of Wakefield were the same. Our modern methods cultivate neither the love for poetry nor apparently the least real appreciation of it. The same may be said of our art-teaching, as far as pictures go. Our children leave their picture lessons tired and disgusted with the world's great masterpieces. What is the matter? It is this.

Let us take an example. "Snowbound" is taught in a class. It is the cheval de bataille with most teachers. In the first place, the poem has been annotated to death. Most of our literature books for school use have this defect. The old-fashioned boy could learn to enjoy Gray's "Elegy" without a note for every line to distract his attention. The boy in the "Snowbound" class, according to his age and section of the country, visualizes it, parses it, copies it, draws it,

diagrams it, paraphrases it, scans it, voices it, breaks up the rhythm, has a "language lesson" from it, puts it into "other words," and worse than all into his "own words." Having offered it every possible abuse, the poor, mangled thing is thrown aside, of no further use, and another "masterpiece" is brought out for treatment. This boy is sure to despise that poem with the utmost vigor of language ever after. Never, never will he read those tiresome words again, if he can help it. By this process a large proportion of the best things in poetry are utterly destroyed as far as their influence for refinement of thought and cultivation of ear goes. As Mr. Brooks argues, the perfume of the violet cannot be obtained by pounding the flower with a stone or analyzing its structure. It must be laid carefully on delicate sheets of wax. It is so with the aroma of poetry. Hard boiling over a quick fire will not do it. It is the wrong kind of process.

"We reached the barn with merry din And roused the prisoned brutes within. The old horse thrust his long head out, And grave with wonder gazed about."

"Put it into your own words, John," says the teacher. No! No! We do not want John's words; we want Whittier's words. They are far prettier than John's and he understands them as they are. They are perfectly intelligible to any child. We do not want them turned into cacophonous prose. We want the music, the rhyme, the jingle, the accent, the prosody. Let John try his hand at putting some of his "own words" into rhyme, if necessary, but let him remember this poem as it is. We do not want the picture cut up and patched together differently. Under ideal home conditions John will hear the whole of "Snowbound," not a part by the fireside, on a snowy winter night. Ten to one John will say: "That was good about about the barn, wasn't it!" Just so the children who "sit up till ten" every Christmas Eve to hear their mother read "Christmas Carol" will learn to love the words of the gentle lesson better every year. So also with the swing of "Ring Out, Wild Bells!" which children will learn to like, without elaborate explanations. There never was a boy yet who did nto like the Iliad, if properly presented to him. We cannot have home conditions in the schools, but can there not be a little of that atmosphere in our poetry-teaching?

Or take the other method of the odious "excerpts" now put into the hands of children to save time. What kind of an impression does this sort of hodge-podge produce? Not the love of poetry. It does no good in the cause of education. The head of Milton's "Lycidas" does not fit the tail of "John Gilpin," and yet that is what the boy often attempts to accomplish. The sight of a composite flower part turnip and part rose is not pleasing, nor would it assist the study of botany. And the "Memory Gems!" Who that has heard these jewels recited in the average classroom can forbear a smile at the remembrance. They are forgotten as soon as learned.

It is the same with modern "picture study" in connection with the work in drawing. One scarcely knows whether to be merry or sad over the deplorable results of some of this teaching. There is certainly no surer way to make children

loathe pictures than this. Our schools are filled with beautiful photographs and casts. Are their beauties allowed to sink in silently? By no means. Is their subtle influence for the bettering of the sense of beauty and the wish to create it allowed its perfect work? Not at all. These pictures must be "taught." The hardest-worked picture in the schools is the Sistine Madonna. It is safe to say that nine children out of ten come out of school with a thorough scorn for it. All enjoyment has forever departed. Even the sight of it in the Dresden Gallery will be a bore to them later, if they tell the truth. We all know these school pictures: "The Gleaners," "The Windmill," "Cattle Plowing," "The Shepherdess," etc. And the cast of St. George! Does he become the boy's ideal? "I'd rather be Bob Fitzsimmons than that old prig," says the boy who has been "taught" that cast.

The facts are to be deplored. Cannot teachers find a remedy? Is it impossible to give our public-school children a real love for poetry and a genuine, if limited, appreciation of the beautiful in art?

MARY FIFIELD KING.

DORCHESTER, BOSTON.

### SECONDARY SCHOOL FRATERNITIES NOT A FACTOR IN DETER-MINING SCHOLARSHIP

To the Editor of the School Review:

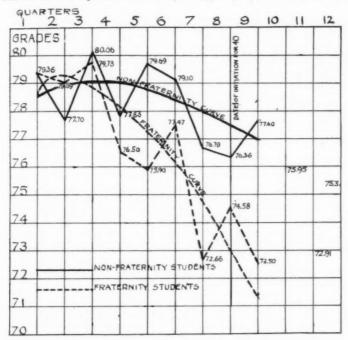
DEAR SIR: By the accompanying diagram I have attempted to show the relation in the Lewis Institute of Chicago between fraternity membership and scholarship. I have not investigated the influence of sorority membership on scholarship, the "boy problem" being capable of independent solution, at least so far as membership in secret societies is concerned.

The Lewis Institute is a "polytechnic school for both sexes," charging a quarterly tuition fee of twenty dollars. Established in 1896, it now has an attendance of about one thousand students in the day school. It is located on a busy street in the midst of small stores of all kinds. The influences that here affect student life are practically identical with those operating in the average city high school. That the tuition fee does not make it an exclusive school is proved by the fact that all grades of society are here represented.

My method of investigation has been as follows: I first made a list of all fraternity students who had attended the Institute for nine successive quarters, beginning with the first. I found sixty-one of such students. Only thirty-five of these sixty-one completed the full twelve-quarter course. I averaged all the grades of these sixty-one for the first quarter, and found a general average of 79.36. I then selected sixty-one non-fraternity students whose general average for the first quarter was also 79.36. The average student of one group was then similar to the average student of the other group in all respects except fraternity relationship. Both groups, fraternity and non-fraternity, started even at the beginning of the second quarter. I then calculated the general average of each group for

the eight following quarters. These general averages I plotted, securing instructive results.

As will be noticed in studying the accompanying diagram, the scholarship curve of both groups trends downward as the quarters pass. But the fraternity curve falls much more rapidly than the non-fraternity curve; so much, in fact, that for the ninth quarter the fraternity average is 5.1 points below the non-



fraternity average, whereas for the third quarter the fraternity average was 0.33 above; for the sixth quarter, only 2.63 below.

Now, if the average initiation date of the sixty-one fraternity boys were the beginning of the fourth quarter or before, one would plainly be justified in saying that the sudden fall afterward was due to the influence of fraternity membership. But the average initiation date of two-thirds of the fraternity students is not the fourth quarter, but the ninth. (Even if the records of the remaining third were attainable and the initiation dates were the lowest probable, the average initiation date would not come earlier than the eighth quarter. And this possible change would not invalidate my results.) Moreover, I calculated for the tenth, eleventh, and twelfth quarters the group averages of the thirty-six before referred to, who

completed the four-year course. I found the averages of these thirty-six for the last three quarters to be, respectively, 75.95, 72.91, and 75.30, in no case lower than the group average for the ninth quarter. Even if these thirty-six were especially studious, fraternity membership evidently exerted no deteriorating influence.

I have therefore concluded that, even if the sixty-one fraternity students had joined no fraternities, they would have fallen quite as rapidly; that in the Lewis Institute and in the ordinary city high schools the fraternity is not a factor in the determination of scholarship, whatever its other influences may be. The real factor is the lack of studiousness on the part of those boys who go into fraternities. Were there in secondary schools, such as those already mentioned, no such organizations as fraternities, there would still be this deterioration in scholarship on the part of these same students. With the vice of lowering scholarship the fraternities as organizations cannot justly be charged.

PHIL. B. KOHLSAAT.

Lewis Institute, Chicago.

### AN EXPLANATION

To the Editor of the School Review:

SIR: After my review of Heath's *Cuentos Castellanos*, in the November issue of the *Review*, was written, it appears that the publishers had in preparation a new edition of the book purporting to be a careful revision of the text and notes. In view of my unfavorable comments under these heads in the old edition, it is proper to add that this revised one has appeared, and that in its present editorial workmanship it is a marked improvement on its predecessor.

R. E. BASSETT.

THE UNIVERSITY OF KANSAS.

## BOOK REVIEWS

### SOME RECENT FRENCH VIÈWS ON CONCRETE METHODS OF TEACHING MATHEMATICS

In view of the discussions which have been taking place in the meetings of various bodies of teachers of mathematics, a brief account of some recent French utterances on phases of the same general topic will have special interest. The works which I shall cite are: Bertrand, Les études dans la démocratie (Paris, 1900, pp. 288); Duclaux, "L'enseignement des mathématiques," Revue scientifique, Vol. I (1899), pp. 353-58; Laisant, L'éducation [ondée sur la science (Paris 1904; pp. 1914+155); Le Bon, Psychologie de l'éducation (Paris, 1904; pp. 304); Tannery, J., "L'enseignement de la géométrie élémentaire," Revue pédagogique, July, 1903, pp. 1-27. I shall refer to these works simply by the author's name.

The writers all concur in urging with emphasis the teaching of mathematics from concrete beginnings. They are combating what Le Bon calls (p. 251) "the ineradicable habit of the Latin race always to begin with the abstract without first passing through the concrete"-a habit the effects of which can be seen throughout French work in mathematics. It has helped produce that clearness of logical exposition which is so characteristic of French thinking and writing on mathematics, but no one can tell at what cost to the minds of the overwhelming majority of the pupils to whom the doors of mathematics open effectively only through the concrete. This has so far called forth less protest than might have been expected, in part at least because mathematics has designedly been used as the instrument in weeding out the candidates for admission to the highest institutions (Le Bon, p. 248; Tannery, p. 16). But voices are not wanting which urge a wider view of the purpose of the teaching of mathematics and a corresponding modification of the methods of instruction. The discussion will be especially helpful to Americans at the present time, when the consciousness is growing that the "habit of commencing with the abstract" has been far too prevalent here, and when we are earnestly seeking to find and apply the remedy.

The work of Laisant consists of four addresses, written in his customary genial style, and delivered at various times during the last four years. They have also been published separately in the Revue générale des sciences. For the purposes of the present paper only the first two addresses, "The Mathematical Initiation" and "The Initiation into the Study of the Physical Sciences," are of interest; the other two, on "Scientific and Psychologic Education" and on "The Problem of Education," not bearing directly on the subject of this paper.

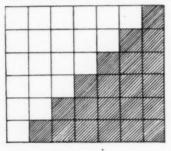
Mr. Laisant sets out with the assertion that even mathematics is an experimental science, that consequently the beginnings of mathematics should be concrete, to be followed later by abstractions, and deplores the fact that the reverse order is at present followed.

I hold that all the sciences without exception are experimental, at least to a certain extent; in spite of certain theories which attempt to treat mathematics as a sequence of operations of pure logic based upon pure ideas, it can be asserted that in mathematics, as in all other scientific domains, there exists no notion,

no idea, which could penetrate into our brain without the previous contemplation of the exterior world and of the facts which this world presents to our observation. . . . From this exterior world the first mathematical notions must be obtained, to be succeeded later by abstractions. . . . Now, how are things done today? Primary instruction, so far as it relates to the first notions of arithmetic, seems modeled on that of grammar; and one might just as well say that the latter is modeled on the teaching of arithmetic. That is to say, in the one as in the other the child is taught a number of abstract and confused definitions which he cannot comprehend; under pretext of giving him good, practical directions, he is burdened with a set of rules; and these rules he learns and retains by dint of memory only and applies them thereafter, well or ill, as may be. (Pp. 2, 3.)

After some discussions, relating more particularly to French conditions, comes the following pregnant passage:

The elementary acquisitions in mathematics—and they are of considerable extent—are no less useful, no less indispensable, than the knowledge of reading and writing. I will even add—and this may perhaps seem paradoxical—that these first elements can be assimilated with much less fatigue than the first notions of reading and writing; on one condition always: that is, instead of presevering in the present system of primary teaching, instead of giving an instruction bristling with rules and formulæ, appealing to the memory, causing fatigue and producing only disgust, the teaching should be inspired by the philosophic fact that it is necessary in the first place to produce images in the child's brain by means of objects presented to his senses. The instruction should be absolutely concrete, occupied only with the contemplation of external objects, and with the description of these objects; it should continually appear, especially in the primary period, under the form of play, and not of study. (Pp. 6, 7.)



Our author practices what he preaches, and proceeds to give quite a number of concrete illustrations of his meaning, including various uses of squared paper and geometric proofs by cutting, among the latter a simple proof of the Pythagorean theorem. As example, the use of squared paper to find the sum of the first n integers may be cited. The figure alone will suffice. The drawing should be made by the pupil. That the number of unshaded squares is the same as that of the shaded squares is seen by turning the paper bottom side up.

Mr. Laisant justly holds squared paper in high esteem:

Squared paper is a marvelous instrument which ought to be in the hands of whoever works in mathematics, from the family or kindergarten to the polytechnic school and even beyond, and, in a general way, of whoever works in science. But from the pedagogic point of view it is an especially marvelous instrument for giving to young children those first notions of form, of magnitude, and of position, without which the work is a sham. (P. 23.)

He also favors the use of paradoxes to interest the child, such as ½ of 12=7 (by Roman notation) and of "mathematical recreations," an abundance of which can be found in the works of Lucas (French), Ball (English), and others. In the second address he cites (pp. 45 ff.) several works of a similar character for physics and chemistry with special view to what can be done without apparatus. Thus: Tissandier, La physique sans appareils; la chimie sans laboratoire (6th ed., 1893); "Tom Tit," La science amusante, Vol. III. Perhaps some reader of the School Review can give a list of analogous works available in English (on physics, chemistry, mathematics).

Our author does not hesitate to assert that mathematics has a physical, experimental side:

Properly speaking, all sciences are physical, all sciences are experimental. Nevertheless, it has been necessary, in view of the infinite variety of facts which nature presents to us, to make a classification. This was indespensable for threading the labyrinth, but it is neither absolute nor perfect nor eternal, and is far from having the importance generally attributed to it. All the sciences interact and interpenetrate; none has sharply defined boundaries. . . . . We live in an immense laboratory—each one of us is a laboratory—the commonest of natural facts which we can contemplate or by which we can be affected represents, so to speak, an infinitude of physical or chemical phenomena superposed. Precisely this superposition blinds us. To know these phenomena precisely, we must be able to isolate them at least relatively, to devise a mode of experimentation which shall make the principal phenomenon predominate so that all the others base unperceived. This is in the experimental domain an operation a little analogous to mathematical abstraction, and it should be governed by the same principles. (Pp. 37–39.)

The greater difficulty and delicacy of the abstractions of the physical sciences is next pointed out. As to the abstract ideas, definitions, rules, principles of mathematics, Mr. Laisant rightly believes that they will take care of themselves; that the child will make "instinctive abstractions" as needed; that the young child should never be urged to make abstractions which he does not make of himself, and that his attention should not even be drawn to those which he has made (p. 27).

Duclaux takes up particularly the question of geometry. After pointing out the rigidity of the Euclidean method, and the way in which simple things are made difficult by its formalism, he goes on to say (p. 356):

How can this fault be corrected? Simply come back to reality. Put a ruler into the hands of the pupil as soon as the straight line has been defined, compasses as soon as the circle has been defined, a square as soon as he knows what an angle is. When the subtleties demanded by the learned march of the Euclidean method are cast aside, that which we call the first book of Euclid can pass in an hour before the eyes of the pupil who, happy to exercise intelligence, initiative, and even intuition, draws from the joint exercise of these powers confidence in himself and an elation which will stand him in good stead when he encounters real obstacles.

The book of Le Bon takes up some interesting phases of the agitation in France which culminated in the new curricula of 1902. Only the chapter on the teaching of mathematics is of direct interest here (pp. 248–58), and its tenor is sufficiently exemplified by the following quotation:

Mathematics is a language, and acquaintance with it no more develops the intelligence than that of other languages. One does not learn a language to exercise the intelligence, but because it is useful to know. Now, the habit of writing the simplest things in mathematical language is today so widespread that it is necessary for the pupils to learn this language, just as it would be necessary for them to learn Japanese, or Sanskrit, if all the books of science were written in these languages.

The only important thing is to know how one can learn rapidly to comprehend and then to speak this special language of mathematicians. Like those of all languages, the beginnings only of this study, are difficult. They must be made in the most tender infancy, at the same time as reading and writing, but by a method diametrically opposed to that which is used today. The teaching must be by experiences, substituting direct observation of quantities that can be seen and touched for reasoning about symbols. What makes the mathematical instruction of the child so difficult is the ineradicable habit of the Latin race always to begin with the abstract without first passing through the concrete. If ignorance of the psychology of the child were not so widespread and so profound, all the pedagogues would know that the child cannot comprehend the abstract definitions of grammar, arithmetic, and geometry, and that be recites them as he would the words of an unknown language. Only the concrete is accessible to him. When the concrete instances have been sufficiently multiplied he will unconsciously deduce from them the abstract generalities. Mathematics ought therefore to be taught experimentally, especially at first, for, contrary to current opinion, it is an experimental science.

The work of Bertrand was published when the agitation which led to the new curricula of 1902 was at its height. It sets forth his views as to French conditions and the ideal secondary school, and devotes an important and interesting chapter to the topic, "The Basis—Mathematics." A citation or two will show his views on the topic discussed in the present paper:

Mathematics ought not to be taught exclusively in the antique method as a pure science; but, according to the modern spirit, as a science at once pure and applied. We have seen with what care mathematics must be made to spring from the crude empiricism of the early years; no less systematic and minute pains must be taken to connect it with scientific experience. I prejudge nothing as to the origin of the mathematical notions; it is the business of metaphysicians to discuss the question whether they arise from experience or are innate in the mind. But this I do know, that it is extremely regretable to aggravate their abstract character still further by separating them from spontaneous experience, and from scientific experience,

The application of algebra to geometry, the application of mathematics to mechanics, are so evident that it is useless to dwell on them. But nothing could be more useful than to show that mathematical deduction shows points of resemblance between the most diverse phenomena—physical, chemical, biological—which direct observation could never have seized, and to show that heterogeneous facts satisfy the same numerical laws, the same geometric and mechanical relations. Mathematical law is the magic key which fits itself to the most complicated locks and, without violence or fracture, opens all doors. The mathematician is more than the auxiliary of the physicist, the chemist, the biologist, the sociologist, the moralist; they are, so to speak, his purveyors; they give him their tangible and visible realities by means of which his abstractions take shape and become themselves visible and tangible. Far from us be that narrow mathematicism which mumbles its theorems like a good dame mumbles her rosary—the one saying for each bead a little prayer, the other a meager demonstration. (P. 206.)

Similar ideas are advanced by one of the mathematical leaders of France, Mr. Jules Tannery, in the article cited above, which is noteworthy in more than one respect:

Is it credible that children thirteen or fourteen years old have a natural taste for logical abstractions, for empty ratiocinations, for demonstrations which seem much less evident to them than the things to be demonstrated? Without doubt, they must be trained to reason correctly, but to reason about realities, or at least to reason about models or images which approximate reality, which are simplifications of what they see, of what they touch. They must be made to experience how, according to Descartes, geometry facilitates all the arts. How shall I make this drawing? How measure this field?

After an illustration of how theory and practice can be made to go hand in hand (triangle and the determination of the distance of an inaccessible object), he proceeds to add:

They [the pupils] will have to reason about things; they must be trained to regard things, to eliminate this or that characteristic which is of no geometric import; to see things in their geometric aspect; to reproduce them by drawing; to gain more exact knowledge of them by measurement. Far from teaching pupils to despise intuition, this very intuition must be developed; they must be shown that they have it, and made little by little to gain confidence in themselves.

As a scientific example, our author takes up the volume of prisms, characterizing the reasoning which establishes the equivalence of oblique and right prisms as suited to "be kept in an historical museum as evidence of how intelligent our ancestors were." He suggests two means of replacing the proof. The one (mediocre) consists of cutting the two prisms into thin slices, or making the prisms out of disks of paper. With such models the theorems can be made "clear as day" to the pupils:

The second procedure, which is excellent, but demands a marked effort, consists in learning some integral calculus before studying the measurement of these volumes. Integral calculus! In the secondary school!! Yev; I am not joking. The effort needed to learn what a derivative is, an integral, and how by means of these admirable tools surfaces and volumes can be evaluated, is certainly less than the effort heretofore demanded of a child to establish the equivalence of oblique and right prisms, of two pyramids (the staircase figure, you know that is so tiresome to make), then the insupportable volumes of revolution; even today I do not know the expression for the volume generated by a segment of a circle turning about a diameter. . . . . .

To teach what is needed of the differential and integral calculus and of analytic geometry will require going slowly, perhaps eight or ten lessons. Do not tell me that the pupils will not understand! Why, then, do they understand what they are taught today about the volumes just mentioned? After these lessons, a quarter of an hour will suffice to establish the expressions for all the volumes of elementary geometry. And think besides of the world of ideas which will open before the pupil; of the multitude of applications which he can make.

To sum up: We have read the words of the head of the mathematical department of one of the leading higher institutions of France (Tannery); of a well-known mathe-

matician and worker in the pedagogy of mathematics (Laisant); of a professor of philosophy (Bertrand); of the head of the Pasteur Institute (Duclaux); of a general writer on a wide range of topics (Le Bon); The are all animated by the same spirit and urge: (a) the fundamental importance of the proper study of mathematics; (b) the concrete origin and the experimental relations of the subject; (c) the deadening effects of teaching on an abstract basis; and (d) the salutary results of beginning with the concrete.

In an address on "The General Definitions of Mathematics" delivered at the Musée Pédagogique, January 21, 1904, Mr. H. Poincaré made remarks of the same trend, advising, for example, the definition of parallels by a square sliding along a ruler and the use of the pantagraph in the theory of similarity.

No recent French publication has come to my notice defending the contradictory assertions, so that it seems safe to say that the French expressions of theoretic thoughts on the teaching of mathematics trend today in the same general direction as the American movement for the introduction of what have been called "laboratory methods" into teaching of mathematics. The French views cited relate exclusively to the method of arranging and developing the subject-matter; with us the term "laboratory methods" connotes also something as to the mode of handling the class. In view of the strict, conventual discipline of the schools, and the fact that pupils, teachers, and textbook writers alike are subject to the absolute domination of detailed curricula, uniform throughout the republic, is it not to be expected that French writers will waste their energies in advocating anything analogous. Numerous voices have been raised against both the rigor of the discipline and the tyranny of the programs (for example, in the Inquest of 1900, and by Laisant and Le Bon), but the outlook for an early and radical change is not good; and until a change in the general policy opens the door, the consideration of details is, of course, out of the question. Even in physics and chemistry, laboratory work by pupils was unknown before the introduction of the programs of 1002.

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Education as Adjustment. By M. V. O'SHEA. New York: Longmans, Green & Co. Pp. 313.

Education as Adjustment is worth reading for three reasons. The first of these is that the author has collected from many sources a mass of valuable facts which are of sufficient concreteness and definiteness to make the volume a good book of reference. The facts are of value because they are detailed and to the point, and therefore scientific. The author follows his own precept: "The greatest need in education today is the development of a scientific temper among teachers and the adoption of scientific method by all who treat of educational questions (p. viii). However, as a reference book the volume might have been improved if the bibliography appended, consisting of 220 titles, could have had notes added to show what the author had found of value in each reference, in some such way as Miss Tanner has done in The Child. Sometimes one suspects that bibliographies are added as credentials and not for use. In the second place, in the most careful consideration that has yet appeared on the subject, it presents the case against formal discipline. The arguments are based upon biological and psychological grounds. Much use is made of facts such as Thorndike has made us familiar with (chap. 13). But it is doubtful if science has yet enough

data with which to lay the ghost. It may be that the educational world is clinging to a fetich; but practical experience seems to indicate that there is more value in formal discipline than the author would have us believe. The chapter is well worth reading. The third point of value is that the author approaches education from a certain standpoint in a more serious way than has heretofore been done, I think. He secures this standpoint after a preliminary search through experience, and upon this as basis defines education as a process of "adjustment." We are familiar with the term in the use of Spencer and the evolutionists, where the aim of the organic life is said to be to secure more and more perfect adjustment to environment. This is the standpoint of the book, I believe. For example: "Each member thus becomes adapted to all features of his environment" (p. 141); or, "The ideal would be to keep all under the influences of the school during the entire developmental period, when the individual is in a plastic condition and easily molded after a given pattern" (p. 130); or, "Everything which goes to make up their daily lives must be adapted to each individual" (p. 281). Of course, this brings up the other phase of educational theory, self-development and self-realization, the gaining control of environment, not the adjusting to environment. And though the author meets this by widening the meaning of "adjustment" (pp. 99-101), one feels that he either is unfortunate in the use of a word with such pernicious associations, throwing the reader off the trail of his real meaning, or he is at heart in sympathy with the narrower meaning, and widens it merely in a formal way when it is brought prominently to his attention, to lapse into the habitual meaning when he is not thinking of it. One implication of a theory of adjustment is a functional theory in education, which would hold that nothing shall be taught which is not of value for adjustment. It is saved from crass utilitarianism by a refining of values to include adjustment to the aesthetic, moral, social, religious, and intellectual environ-

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